#### 2003-2008

#### CAPITAL IMPROVEMENTS PLAN

#### CITY OF MILWAUKEE

State of Wisconsin

John O. Norquist Mayor

Department of Administration Budget and Management Division

Michael Soika Administration Director Director Laura J. Engan Budget and Management

John Ledvina Capital Planning and Finance Specialist

**Budget and Management Staff:** 

Thomas Bell Eric Pearson
Jennifer C. Gonda Sandra J. Rotar

Patrick Hartmann Dore Marie Rozwadowski

Crystal Ivy Erick Shambarger
Katherine O'Sullivan David Schroeder
Dennis Yaccarino

#### MILWAUKEE CITY OFFICIALS

MAYOR JOHN O. NORQUIST

CITY ATTORNEY GRANT F. LANGLEY

COMPTROLLER W. MARTIN MORICS

CITY TREASURER WAYNE F. WHITTOW

#### **COMMON COUNCIL**

#### PRESIDENT - MARVIN E. PRATT

MARVIN E. PRATT	ALDERMANIC DISTRICT 1
VACANT	ALDERMANIC DISTRICT 2
MICHAEL S. D'AMATO	ALDERMANIC DISTRICT 3
PAUL A. HENNINGSEN	ALDERMANIC DISTRICT 4
JAMES A. BOHL JR	ALDERMANIC DISTRICT 5
MARLENE E. JOHNSON-ODOM	ALDERMANIC DISTRICT 6
FREDRICK G. GORDON	ALDERMANIC DISTRICT 7
ROBERT G. DONOVAN	ALDERMANIC DISTRICT 8
DONALD F. RICHARDS	ALDERMANIC DISTRICT 9
VACANT	ALDERMANIC DISTRICT 10
JOE DUDZIK	ALDERMANIC DISTRICT 11
ANGEL SANCHEZ	ALDERMANIC DISTRICT 12
JEFFREY A. PAWLINSKI	ALDERMANIC DISTRICT 13
SUZANNE M. BREIER	ALDERMANIC DISTRICT 14
THOMAS G. NARDELLI	ALDERMANIC DISTRICT 15
MICHAEL J. MURPHY	ALDERMANIC DISTRICT 16
WILLIE L. HINES JR.	ALDERMANIC DISTRICT 17

#### PUBLIC DEBT COMMISSION

COMMISSIONER MARGARET J. HENNINGSEN, CHAIRPERSON COMMISSIONER TIMOTHY J. ELVERMAN COMMISSIONER MICHELLE J. NATE

**EX-OFFICIO MEMBERS:** 

W. MARTIN MORICS, SECRETARY WAYNE F. WHITTOW, TREASURER

## **TABLE OF CONTENTS**

	PAGE
2003-2008 CAPITAL IMPROVEMENTS PLAN: EXECUTIVE SUMMARY	1
CAPITAL INVESTMENT PLANNING: MILWAUKEE'S APPROACH	4
CAPITAL IMPROVEMENT FINANCING	6
2003-2008 CAPITAL IMPROVEMENTS PLAN: MAKING CRITICAL CAPITAL INVESTME	NTS12
2003-2008 CAPITAL IMPROVEMENTS PLAN BY FUNCTION (Table 2)	15
2003-2008 CAPITAL IMPROVEMENTS PLAN BY DEPARTMENT (Table 3)	16
2003-2008 CAPITAL IMPROVEMENTS PLAN BY FUNDING SOURCE (Table 4)	17
SURFACE TRANSPORTATION	18
Streets	
Alleys	
Bridges	
Street Lighting and Traffic Control	20
Sidewalks	
Parking	
ENVIRONMENT	
Sewers	
Water Works	
Forestry	
Sanitation	
Environmental Remediation	28
HEALTH AND SAFETY	
Fire	
Police	
Health	32
ECONOMIC DEVELOPMENT	
Tax Incremental Districts	
Business Improvement Districts	36
Development District Funds	37
Port of Milwaukee	37
CULTURE AND RECREATION	
Libraries	
Municipal Art Fund	
Recreation	40
GENERAL GOVERNMENT	
Maintenance and Remodeling	
Communications and Control System	
Underground Conduit and Electrical Manhole Programs	43

## **TABLE OF CONTENTS (Continued)**

APPENDIX	PAGE
2003-2008 Capital Improvements Plan (Table 13)	45
MILWAUKEE PUBLIC SCHOOLS	50
INVENTORY OF CAPITAL ASSETS	52

## 2003-2008 CAPITAL IMPROVEMENTS PLAN: EXECUTIVE SUMMARY

The 2003-2008 Capital Improvements Plan is an integral part of the city's long range financial planning. The two primary goals of the 2003-2008 Capital Improvements Plan are to maintain and strengthen the city's existing capital assets and to provide appropriate funding that meets overall spending, debt, and tax rate goals.

The 2003-2008 Capital Improvements Plan continues an important city goal of maintaining and strengthening the city's capital stock. The plan, which includes the 2003 adopted capital budget, allocates a total of \$1.049 billion to a variety of capital projects and programs. Of this total, \$679.7 million will be funded directly through city resources while the remaining amount, \$369 million,

will be funded through intergovernmental aid or through self-funded sources such as the Water, Parking, and Sewer Enterprise Funds.

This section of the document puts the 2003-2008 capital plan in a historical context with a discussion of how funding levels over the next six years compare to the recent past. Contained within this overall discussion will be an explanation of the fluctuations in annual capital budgets as well as a description of some of the major projects that have had a significant impact on the city's capital budget in recent years. This section also briefly describes some of the specific "critical capital investments" which will be funded during the life of the six-year plan.

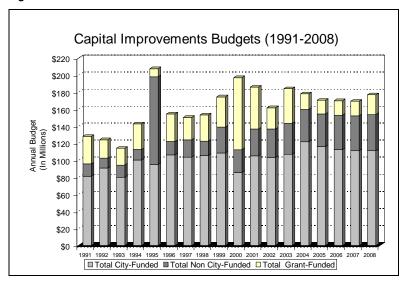
#### THE CAPITAL BUDGET: PAST AND PRESENT

As shown in Figure 1, the city funded portion of Milwaukee's capital budget increased overall from 1991 to 1999. In 2000, the city funded portion declined and is projected to remain fairly constant through 2008 averaging approximately \$113 million each year. One factor contributing to this decline is the transfer of the Relief and Relay Sewer Program to the Sewer Maintenance Fund. This change also contributes to the increase in non-city funded capital in 2000 and beyond.

The increase in city funded capital expenditures apparent in 1996 through 2000 results from a series of significant (annual project cost exceeding \$10 million), one time special projects. In 1996, the city included \$18 million in cash revenue offset spending authority for stadium improvements associated with the Miller Park

project. In 1997, the budget included \$15 million in city borrowing authority for a Milwaukee Economic Development Commission (MEDC) loan for the Milwaukee Brewers, which would also assist in covering stadium related costs. The 1998 capital budget included \$10.9 million in borrowing authority to fund the purchase and installation of a new Financial Management Information System

Figure 1



(FMIS). The 1999 and 2000 budgets included \$12.5 and \$20.5 million respectively for the construction of a new Data Com Center/District Station for the Police Department.

Excluding large one time projects from the analysis, city funding of capital needs appears quite consistent. For instance, if the \$18 million in cash revenue offset spending authority is excluded the

total city funded capital budget in 1996 is approximately \$88 million. If the \$15 million MEDC loan is excluded, the 1997 capital budget also totals \$88.9 million. When the funding provided for the FMIS project is excluded from the 1998 budget, the city funded capital budget totals only \$94.8 million. In the case of 1999, the exclusion of the Data Communications Center/District Station project generates a city funded capital budget of \$96.2 million, an amount more consistent with prior year funding amounts. In 2000 infrastructure projects, such as the new Sixth Street Viaduct, received substantial state and federal aid funding. This resulted in lower city funding requirements for the projects.

Large one time projects funded through non-city sources also inflate past capital budgets. In 1995, the non city funded portion of the capital program includes approximately \$81 million for a Water Works Ozonation Project (see Figure 1). Excluding this one time project, funding levels for non-city funded capital are relatively constant from 1991 to 2001.

Funding for the 2003-2008 Capital Improvements Plan is also relatively constant over the six-year period. The city funded portion of the program ranges from approximately \$107 million to approximately \$122 million over the life of the plan. The non-city funded portion, which includes the Water Works, Parking Fund, and Sewer Maintenance Fund ranges from approximately \$36 million to approximately \$43 million. Grant and aid funding over the life of the plan ranges from \$40.7 million in 2003 to \$16.2 million in 2005. Grant and aid capital funding peaks at \$40.7 million in 2003 largely due to grants for the West Canal Street reconstruction and extension and preparation for the Marquette Interchange reconstruction.

This analysis shows that capital funding has remained relatively constant (in nominal terms) once certain large one time projects are removed from the equation. It is important to note that although the aggregate level of funding has not increased over time, Milwaukee's capital infrastructure has not been adversely affected. In fact, Milwaukee's infrastructure systems have not only been adequately maintained but in fact have even expanded over the last decade.

#### 2003-2008 CAPITAL IMPROVEMENTS PLAN: CRITICAL CAPITAL INVESTMENTS

The 2003-2008 Capital Improvements Plan outlines the major initiatives and/or program changes that are planned during the life of the six-year plan. The following is an overview of some of the "critical investments" that the document describes in greater detail.

- Capital Equipment: Beginning in 2002, durable equipment with a unit cost of \$50,000 or more is financed through the capital improvement fund. This long lasting equipment included fire engines, ladder trucks, and ambulances, DPW vehicles such as sweepers, dump trucks and garbage packers and other specialized equipment such as a conduit directional boring machine. Over the six-year plan \$52 million is provided for capital equipment.
- City Hall Restoration Program: Milwaukee's
   City Hall is an architecturally significant landmark building listed on the National Register
   of Historic Places. The 2003-2008 plan includes
   funding of \$31.7 for city hall restoration. In
   2006, \$5 million is allocated for City Hollow
   Walk Replacement. A further \$3.5 million is
   placed in Unspecified Projects in 2005 and 2006

for contingencies including possible replacement of the main slate roof.

This funding plan was developed after DPW and Budget and Management staff evaluation of two extensive studies that detailed the structural renovation needs of city hall. Engineering and architectural consultants found significant structural problems with the towers, exterior walls, interior walls, and supporting structure. Renovations will start in 2003 and are expected to continue through 2006.

- Hartung Quarry Landfill: The city's remaining landfill, the Hartung Quarry Landfill, is used to dispose of clean construction debris generated by city crews. The landfill is expected to reach capacity in 2004. Funding is provided in 2003 for testing and to prepare closure plans. In 2004, \$1.2 million is provided to close and cap the landfill per Wisconsin Department of Natural Resources specifications.
- Trunked Radio Communications: Approximately \$14 million will be provided for

trunked radio communications in from 2003 through 2005. A \$300,000 study to determine citywide requirements was funded in 2001. This conversion is imperative, as the Federal Communications Commission (FCC) is reallocating frequency ranges in 2005. A FCC compliant digital system will allow several users to communicate over the same frequency simultaneously. It will also ensure that various local agencies are able to communicate on mutually accessible frequencies.

• West Canal Street Reconstruction and Extension: The improvement and extension of West Canal Street from North Sixth Street to the Miller Park Baseball Stadium is scheduled to begin construction in 2003. Approximately \$10 million of city funding is provided to match grant funding for this project. This project is considered vital to the redevelopment of the Menomonee Valley. It will also serve as an alternate travel route during the planned up-

coming reconstruction of the Marquette Interchange.

**Tax Incremental Districts:** The six-year plan includes \$86.6 million for tax incremental financing district development. In 2003, \$14 million is provided to facilitate a number of developments, including infrastructure for redevelopment after removal of the Park East Freeway (\$7.5 million) and redevelopment of the Shops at Grand Avenue Arcade (\$6.5 million). Projects under consideration for plan years include a mixed use Granville Station to replace the defunct Northridge Mall (\$5 million), Menomonee Valley redevelopment totaling (\$16 million), additional funding for the Park East corridor redevelopment (\$6.5 mil-The Park East redevelopment project alone is expected to generate over \$100 million of new development immediately north of the present downtown area.

#### 2003-2008 CAPITAL IMPROVEMENT PLAN: FUTURE DIRECTIONS

Monitoring State Financial Crisis: The State of Wisconsin is facing a \$3.5 billion deficit in the next biennium (2003-2005) including a \$454 million deficit in the current biennium. In February 2003, Governor Jim Doyle made proposals to eliminate the deficit which included a reduction in state shared revenue payments made to local units of government. The governor's proposals will be considered by the state legislature during its spring session.

The city's portion of the proposed state shared revenue reduction is approximately \$10 million. Such a reduction would have a substantial impact on the city's operations and capital budgets. Should the proposed reductions in state shared revenue occur, the city may have to reprioritize its capital program with specific attention placed on preserving Milwaukee's physical infrastructure.

**Strengthening Decision Making:** The City of Milwaukee has historically engaged in vigorous planning as a strategy to preserve and strengthen its capital stock. The city will not only continue the implementation of this strategy but enhance its efforts as well. Capital decision making will be strengthened through the development of a capital investment model. This model will help policymakers choose between various projects based upon the project's "value-added" impact on the city's capital stock. In addition, the city will implement stricter project management and accountability standards to ensure that decisions made by policymakers are implemented in a manner consistent with budgetary and policy intent.

## CAPITAL INVESTMENT PLANNING: MILWAUKEE'S APPROACH

The 2003-2008 Capital Improvements Plan reflects the city's long range capital needs and citywide objectives as outlined in the city's strategic plan. In addition, the plan incorporates the city's long-range fiscal plan through the implementation of various capital financing strategies.

The capital improvements plan not only identifies projects and estimates costs, it also identifies funding sources. A summary of the capital improvements planning process, as well as definitions of capital projects, is presented below.

#### **Program Assumptions**

The 2003-2008 Capital Improvements Plan estimates future costs based on present value (in 2003 dollars) and does not adjust for inflation. This is comparable to other local taxing jurisdictions, which do not adjust for inflation in their capital improvement plans.

#### **Planning Process**

The capital improvements planning process includes development of both a one-year budget and a six-year plan. The six-year plan is reviewed annually by city departments and the Budget and Management Division as part of the overall budget review process.

By April of each year, city departments prepare and submit a one year budget and a six year capital improvements plan to the Budget and Management Division. Capital requests are reviewed and recommendations are made to the Mayor. After a series of public hearings, the Mayor submits the executive city budget, which includes capital improvements, to the Common Council. The Common Council's Finance and Personnel Committee reviews the executive budget, holds additional public hearings, and submits its recommendations to the full Common Council. After the Common Council and the Mayor approve the budget, the adopted capital improvements budget is established as the initial year of the six-year capital improvements plan.

#### Planning for the "Out" Years

The value of any capital plan can be evaluated in how well it enables the city to anticipate future capital commitments. Through planning, the city can avoid system failures and corresponding fiscal stresses. A long term horizon is essential to this planning process, yet it is the most challenging aspect of planning. The city will continue to focus on improving its ability to plan for projects in the last several years of the six year plan.

#### **Capital Project Definition**

A capital project includes the purchase, construction, enhancement, or maintenance of physical infrastructure systems or facilities. These include bridges, streets, alleys, sidewalks, street lighting, traffic control, parking facilities, port facilities, sewer system, water system, public buildings and related equipment, underground conduit and manholes, communication systems, major equipment purchases, boulevards, trees, and recreation facilities. In addition, a capital project may enhance economic development through job creation, business formation, and housing production.

Capital improvements typically meet one or more of the following criteria:

- 1) Renovation or restoration of buildings, structures, facilities, and integral equipment items whose cost exceeds \$25,000;
- 2) Construction of new or replacement buildings or structures at a cost exceeding \$25,000 including planning and design costs;
- 3) Remodeling of office and shop areas;
- 4) Durable equipment with an original unit cost of \$50,000 or more;
- 5) Equipment and furnishings which are to be purchased as a part of a capital project; and
- 6) Replacement equipment (an integral part of a building, structure, or facility) which costs \$25,000 or more.

#### **Oversight of Capital Projects**

The city employs a decentralized approach to capital project management and oversight. In the recent past, large capital projects have presented administrative challenges. These include budget overruns and contention regarding controlling decision making authority for changes to the original plan. While individual departments are now granted expenditure authority for a project, the Department of Public Works Operations Division, Buildings and Fleet Section works as the project manager for the facility design and construction. This split of authority and responsibility has caused difficulties in communication between DPW and "customer" departments, for accountability, accu-

rate estimation of project expenditures, and design/construction changes.

In 2003, the Budget and Management Division will evaluate how capital accounts are managed with the goal of ensuring better reporting and accountability to the administration and the Common Council. It is anticipated that changes in how projects are reported and monitored will increase departments' accountability to ensure projects are kept within budget and time constraints. This should minimize funding shortfalls and requests to the administration and Common Council for additional funding to complete projects.

### CAPITAL IMPROVEMENT FINANCING

The 2003-2008 Capital Improvements Plan not only includes a list of projects which the city intends to fund over the next six years, but also an explanation of how it will finance these projects. The fi-

nancing goals and strategies used by the city as well as a thorough description of the various funding sources utilized to fund the capital plan are discussed in this section.

#### **CAPITAL FINANCING GOALS**

The primary objective of the 2003-2008 Capital Improvements Plan is to protect and enhance the city's infrastructure in the most cost effective manner. To achieve this objective, the city has established four specific capital financing goals:

- 1) To fund adequately the city's infrastructure and general capital needs;
- 2) To moderate the city's overall debt burdens;
- 3) To achieve greater intergenerational equity in terms of funding major, non-recurring capital projects; and
- 4) To control tax levy supported capital spending so as to assist the city in meeting its general goal of tax rate reduction, which, in turn, further enhances the city's competitive position.

The 2003-2008 Capital Improvements Plan achieves all four of these goals by dedicating a total of \$1 billion to the city's capital budget (including Parking, Sewer Maintenance and Water Works, and intergovernmental grants). This sum reflects the city's intention to maintain its existing infrastructure in a manner that will not only heighten Milwaukee's economic vitality today, but also ensure that the next generation inherits a city that remains physically strong and economically sound.

In attempting to achieve the second stated goal of moderating the city's debt burden, the 2003-2008 capital plan continues to implement the city's infrastructure cash conversion policy. This policy has helped the city control debt by increasing tax levy financing of recurring infrastructure projects. By 2005, 100% of the city's recurring infrastructure budget will be cash levy financed.

Although moderating the burden of outstanding debt has been an important goal of the city, policy-makers also remain pledged to use long term debt instruments, when appropriate. Large non-recurring projects, such as the Police Department's recently constructed Data Communications/Third

District Station facility, are appropriately funded with long term debt. Such projects have long useful lives and, as a result, benefit several generations of taxpayers. Milwaukee has made a commitment to support intergenerational equity while limiting increases in outstanding debt.

Debt is structured to reflect the project benefits. Short term projects are financed through one to five year notes. An example is the one year note to finance the 2002 Equipment Replacement Program, which replaced aged equipment that was beyond economic repair. Another example is the past issuance of five-year notes for certain short-lived aspects of the financial management information system.

The fourth goal of controlling spending in order to assist the city in reducing property taxes will be achieved by moderating growth in the tax levy supported capital budget (specifically, tax levy-cash and tax levy-supported debt; self-supported debt is excluded) and by pursuing alternatives for addressing capital needs. In 2003, the tax levy-supported portion of the capital budget totals approximately \$75.6 million. The 2003-2008 capital plan annual tax levy supported capital budget averages approximately \$82.1 million. To compensate for inflationary price increases and other cost increases over time, the city must continue to find more cost-effective methods for meeting its capital needs.

In addition, the plan will hold the tax levy-supported portion at approximately 47% of the total capital budget. The tax levy supported portion of the capital budget is slightly lower in 2003 due to increased intergovernmental aid for major street and bridge projects, most notably the West Canal Street reconstruction and extension. Figure 2 shows how the tax levy-supported portion of the city's capital budget will fluctuate over the life of the plan.

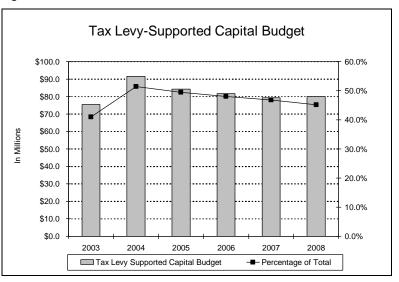
Non-property tax resources finance more than half of the city's capital needs. These sources include Parking and Sewer Funds, the Milwaukee Water Works and intergovernmental aids. Since 2000, the Sewer Maintenance Relay capital program has been financed by the Sewer Maintenance Fund. The transfer of the sewer capital maintenance program to the fund was intended to capture all costs related to maintenance of the city sewer system on the Sewer User Fee. Sewer capital programs related to system expansion remain in the tax levy-funded portion of the capital budget.

Intergovernmental grants and aids are of particular importance to the city, especially in the area of transportation projects, which make up roughly 12.6% of total city funding for capital in the 2003-2008 capital plan.

Most of the intergovernmental grants to the city help to finance major street projects, bridge projects, and the Port's Dockwall Rehabilitation Program. In 2003, the Police Department will receive \$3 million in grants to begin implementation of a Digital Trunked Radio System. These funds typically come from the state and federal government, while the city is usually required to finance a portion of the cost.

In the case of major bridge and street projects, the city is typically required to finance between 12.5%

Figure 2



and 20% of the design and construction costs. In return, the county, state, and federal governments finance the remaining costs.

Tax incremental districts (TIDs) represent yet another important funding source for city capital projects. Since the mid-1970's, the city has created 51 TID districts. Funding provided in the adopted 2003 capital budget, as well as in the last five years of the 2003-2008 Capital Improvements Plan, will finance existing TID projects, provide funding for projects currently in the initial stages of planning, and allow for city involvement in potential developments under discussion.

#### **DEBT FINANCING STRATEGIES**

An objective of the city is to maintain Milwaukee's AA+ general obligation bond rating (Standard and Poor's and Fitch's Investors Services). As of August 2002, the city received strong ratings from the bond rating agencies: an AA+ from Fitch's Investor's Services, an Aa2 rating from Moody's Investors Services, and an AA rating from Standard and Poor's. The city's ratings are a reflection of a substantial Public Debt Amortization Fund, rapid debt pay out, and increased use of pay-as-you-go financing for recurring capital needs. Although all the bond rating agencies indicate that the city's debt levels are moderately high, they remain affordable and are offset by the capital financing policies employed by the city. Appropriately man-

aging future debt levels will continue to be an important goal for the city.

#### **Debt Structure**

One especially important debt financing strategy used by the city relates to how it structures its debt issuances. The general policy of the city relating to general obligation bonds is to issue 15 year, level principal payment bonds. This policy produces higher payments in the early years of a bond issue, but produces lower total financing costs. As a result of this rapid debt amortization schedule, 55% of principal is retired in five years and 86% is retired in ten years.

One area of the capital improvement budget, which is financed through a different debt structure, is tax incremental districts (TIDs). In 1998, the city began to implement a new debt structure for TID projects that was designed to eliminate a timing problem which required the city tax levy to help support these normally self-supported projects. The TID financing structure stretches out the maturity schedule of the bonds to 17 years (two years longer than the typical GO bond term used previously) and capitalizes interest (principal and interest payments are deferred) in the first two years of the bond's life.

In 2001, the city began issuing revenue bonds to implement its capital financing policy goal where appropriate. Currently, most of the city's debt is general obligation, irrespective of the project's ability to generate revenues. The 2000 budget included borrowing authority for revenue bonds for projects with revenue sources. The Sewer Maintenance Fund issued \$29.1 million of revenue bonds in November, 2001. The Water Works and Parking Fund may issue revenue bond debt in the near future.

The reason for the use of revenue bonds is to appropriately fund projects using user fee revenue rather than the tax levy supported debt and to eliminate taxpayer liability for debt payment. To justify the investment, projects funded with revenue bonds should maintain an adequate revenue stream to cover debt service costs.

#### **Public Debt Amortization Fund**

Another important debt financing strategy used by the city involves use of the city's Public Debt Amortization Fund (PDAF). This fund, which is administered by the city's Public Debt Commission, was created in 1925 by state statutes. Fund revenue includes interest earned by assets of the fund, one-third of the general interest earnings of the city, and one-third of interest received on delinquent personal property taxes.

Table 1 shows how the unsegregated portion of the PDAF balance has fluctuated over time. This is largely due to the PDAF's investments in interest rate sensitive long term U.S. Treasury securities. In 1997 and 1998, the PDAF had earnings of approximately \$10.3 million each year. In 1999, rising interest rates caused significant market value declines. Revenues declined to \$3.9 million. In 2000,

Table 1

PDAF	Unsegregated E	Balance (In Thou	sands)
	Fund		Fund
Year	Balance	Year	Balance
1988	56,809	1996	52,622
1989	56,935	1997	53,797
1990	55,663	1998	52,666
1991	56,551	1999	45,054
1992	56,803	2000	43,499
1993	56,456	2001	43,652
1994	57,088	2002 (Est.)	44,326
1995	56,891		

revenues rebounded to \$9.4 million. Revenues for 2001 totaled \$7.2 million. These market fluctuations have made it difficult for the city to achieve its goal of maintaining the unsegregated portion of the PDAF within the range of 15% to 20% of the city's non-self supporting general obligation debt. The city has addressed this challenge by reducing the annual PDAF draw for prepayment purposes. For example, the 2003 PDAF draw is \$5 million, a reduction of \$2 million from the 2002 draw of \$7 million, and the lowest withdrawal in over a decade.

Fund assets play an important role in capital financing in two primary ways: (1) fund resources may be used to prepay a portion of the principal and interest on city debt due the following year, thereby reducing the levy portion of the debt budget (in 2003, a \$5 million of fund resources will be used for this purpose), and (2) the fund itself functions as a "debt reserve" which helps provide city bondholders with added assurance of the city's ability to make principal and interest payments. This in turn reduces the city's interest rate costs because city bonds are more attractive to investors.

#### **Debt Management Working Group**

As previously mentioned, a primary goal of the city is to maintain its AA+ bond rating. The city recognizes that overlapping debt is an important factor in meeting this goal. In 1992, a Debt Management Working Group was created by Common Council resolution. The working group includes five local units of government including the City of Milwaukee, Milwaukee County, Milwaukee Metropolitan Sewerage District, Milwaukee Area

Technical College, and Milwaukee Public Schools. Since its inception, the working group has completed four annual reports on "Capital Spending and Debt" for the five local units of government. The report analyzes the historical and planned capital spending and debt trends of each unit of govern-

ment. The purpose of this analysis is to develop practical methods for coordinating, managing, and controlling the amount, structure, and timing of debt issued by each of the member governments. The goal is to minimize the overall debt burden on city residents while meeting essential capital improvement needs over the next five years.

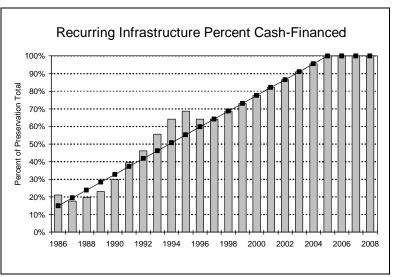
#### **CASH FINANCING STRATEGIES**

One key cash financing strategy of the city's capital improvements program is to limit debt financing for capital improvements to only those projects which occur at irregular intervals and benefit future as well as current taxpayers. The purpose of cash financing recurring infrastructure projects is to decrease overall debt and ultimately reduce the overall tax levy.

To implement this strategy, the Common Council adopted a resolution in 1986 that gradually converts funding for recurring infrastructure preservation projects from borrowing to cash financing. Recurring infrastructure includes local streets, alleys, sidewalks, street lighting, traffic control, communications, underground conduits, and recreational facilities.

The strategy employed by the City of Milwaukee includes financing 100% of recurring infrastructure replacement with cash by the year 2005. Figure 3 compares the percent of infrastructure cash financed as required by resolution with the percent of infrastructure cash financed in the 1986-2002 capital improvements budgets and the 2003-2008 Capital Improvements Plan.

Figure 3



The city has met or exceeded its cash financed infrastructure goals since 1991, a period of eleven years. The 2003 budget meets the cash financing level required by resolution (91.04%), and the 2003-2008 plan will meet the 100% cash financing goal in 2005.

#### STRATEGY IN ACTION: SOURCES OF FUNDING FOR THE 2003-2008 CAPITAL IMPROVEMENTS PLAN

All projects identified in the 2003-2008 Capital Improvements Plan are fully-funded through a variety of sources. These sources include tax levy-supported debt, tax incremental districts, special assessments, cash revenues, tax levy, self-funded, and grants and aids. Figure 4 illustrates the percentage of the six-year plan financed by each funding source. As a result of using this diverse set of funding sources over the next six years:

- 1) The overall capital needs of the city will be
- 2) The city will continue to increase the proportion of recurring infrastructure projects financed with tax levy resources; and
- The city will continue to use long-term debt to finance non-recurring projects that have long useful lives.

The specific sources of funding for the 2003-2008 capital improvements plan are described in the

following sections. In addition, Table 4 (see page 17) details how the six-year plan is financed.

Tax Levy-Supported Debt: The six-year plan estimates the amount of funds that must be borrowed to finance capital projects. This amount does not include special assessments or tax incremental financing since they are considered self-sustaining. though they are funded through general obligation borrowing. In the six-year plan, \$389.8 million, or 37.1% of the total capital budget is expected to be borrowed, excluding \$129.3 million in special assessment and tax incremental borrowing. As shown in Table 4, tax levy supported debt peaks in 2004 at \$75 million and averages \$65 million throughout the six-year plan. The stable nature of the plan, in part, re-

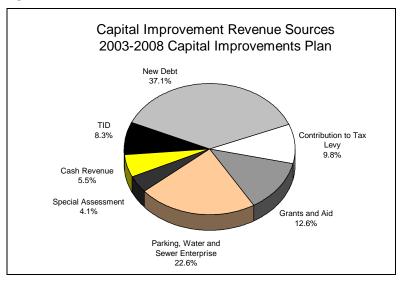
flects a strategy of cash financing for infrastructure projects, which reduces projected debt financing of infrastructure projects by nearly \$1.8 million from 2003 to 2008.

Several projects are responsible for the peak in 2004. The multi-year City Hall Restoration project increases \$3.8 million from 2003 to 2004. Police Trunked (Digital) Radio and facilities improvements increase \$3 million each. Other projects or programs that contribute to the increase include Neighborhood Library Remodeling (\$1.7 million), the Port's Water/Rail Transfer Facility (\$1.5 million), and DPW's closure of the Hartung Landfill (\$1.2 million).

Tax Incremental Districts: These districts are considered self-sustaining and have been funded through issuance of general obligation debt. After a tax incremental district is established, debt instruments are issued to finance public improvements to aid development within the district. The increase, or increment in real property taxes after a district is established is set aside and used to retire debt contracted by the authority. As shown in Figure 4, \$86.6 million, or 8.3% of total capital funding is provided to fund tax incremental districts. Funding for this purpose ranges from \$14 million to \$14.7 million annually in the six-year plan.

**Special Assessments:** Special assessments are considered self-sustaining debt even though they are issued as general obligation debt.

Figure 4



When certain infrastructure improvements are made, such as repaving a street or installing a new sewer, part of the cost is charged to the abutting property owners as special assessments. The property owner may either pay the entire amount when the bill is received, have the assessment placed on the next tax bill, or pay the amount over six years, with interest charged for the final five years. If the latter option is chosen, the interest cost to the city is offset by the interest charged to the property owners. However, regardless of how the property owner pays the special assessment, the city borrows the funds as general obligation debt to finance the project.

As Figure 4 shows, \$42.7 million, or 4.1%, of capital projects are financed through special assessments. Funding throughout the six-year plan ranges annually from \$6.6 million to \$8 million.

Cash Revenues: A portion of capital projects are financed through cash revenues, including general (or unassigned) grant and aid, developer financing, and other sources of revenue. The grant fund provides funding authority for grant and aid that may be received throughout the year but is not specifically included in the capital improvements plan. Developer-financed projects occur when a private developer requests the city to expand street or sewer systems. These projects are fully financed by the developer who enters into a formal agreement with the city. In the six-year plan, \$57.8 million, or 5.5% of all capital projects are funded through cash revenues. This source of funding averages \$9.6 million in the six-year plan.

**Tax Levy:** Tax levy funding of capital projects totals \$102.8 million, or 9.8% of total funding, over the six-year plan. As shown in Table 4, total tax levy-funding is projected to remain stable throughout the plan, averaging \$17.1 million each year. During the 2003-2008 plan, the city meets its infrastructure cash financing objectives, increasing funding from \$12.2 million in 2003 to \$14 million in 2008. In addition, at least 5% of non-infrastructure projects are cash financed during the six-year plan.

**Self-Funded:** These projects include those financed through the Parking Fund, Sewer Maintenance Fund and Milwaukee Water Works. The Parking Fund was established to account for revenues received from parking operations. Parking revenues are used to defray all costs related to these operations, including debt service costs on various parking obligations. Milwaukee Water Works' capital improvement projects and Sewer

Maintenance Fund capital improvements are fully financed by their respective user fees. In total, \$236.9 million, or 22.6%, of capital projects are funded through the Parking Fund, Sewer Maintenance Fund and Milwaukee Water Works.

**Grants and Aid:** In the six-year plan, funding provided through grants and aids totals over \$132.2 million, or 12.6% of total funding. This funding is received from the state and federal governments, primarily for bridge and paving programs. Grant and aid funding fluctuates dramatically, from a high of \$40.7 million in 2003 to a low of \$16.2 million in 2005. The reconstruction and extension of West Canal Street and other preparations for the reconstruction of the Marquette Interchange account for most of the higher 2003 grant and aid amount.

## 2003-2008 CAPITAL IMPROVEMENTS PLAN: MAKING CRITICAL CAPITAL INVESTMENTS

The 2003-2008 Capital Improvements Plan includes the 2003 capital budget, which was adopted by the Common Council in November 2002, as well as planned capital expenditures for 2004-2008. The six-year Capital Improvements Plan is not a formally adopted plan and does not appropriate funds, but functions as a capital spending guide.

Capital appropriations for the last five years of the plan are made through adoption of the annual budget. This section shows the six-year capital needs of the city and their anticipated sources of funding. New and continuing projects are outlined in the summary table provided in the appendix of this document.

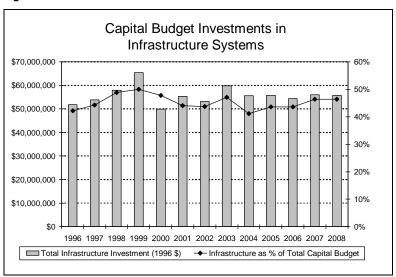
#### THE CAPITAL BUDGET FOCUS: STRENGTHENING INFRASTRUCTURE

An important function of local government is maintaining basic infrastructure systems. These systems – sewers, water mains, streets, bridges, alleys, sidewalks, and street accessories (traffic signals and streetlights) - are essential to the economic viability of any city.

The City of Milwaukee invests significant resources in its infrastructure systems. Figure 5 shows the capital budget for infrastructure in real terms for the years 1996-2008 (intergovernmental grant and aid is excluded). As the graphic demonstrates, the real dollar amount budgeted for infrastructure has remained relatively stable, with the exception of 1999 and 2003. In 1999, a large sewer project contributed to a significant increase in the amount budgeted for infrastructure. In

2003, a major street project, the reconstruction and extension of West Canal Street, increases infrastructure spending to over \$60,000,000. Figure 5 also shows that the percentage of total capital expenditure dedicated to infrastructure expansion and replacement increased from the 1996 to 1999 budget. The percentage decreased slightly in 2000 and again in 2001 with the multi-year construction of the Police Data Communication/Third District Station and large intergovernmental grant and aid

Figure 5



for the Sixth Street Viaduct project. With the exception of 2003 (West Canal Street referred to above) the proportion shows a slight increase during the 2003-2008 plan.

The 2003-2008 Capital Improvements Plan continues to maintain the real dollar value of the annual infrastructure maintenance and expansion budget. The effect of this level of commitment to infrastructure is quite substantial.

#### PRESERVATION vs. EXPANSION

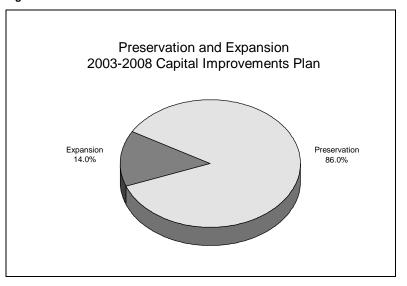
Capital projects are classified into two categories: preservation and expansion. Preservation refers to capital improvement projects whose major objective is to reconstruct, rehabilitate, or otherwise re-

store an existing system or facility to full functionality. In contrast, expansion refers to projects whose primary objective is to construct a new system or to expand an existing system or facility to

meet increased demands or to enhance development.

Figure 6 illustrates the proportion of capital projects that either preserve or expand capital infrastructure. The 2003-2008 Capital Improvements Plan (including grants and aid and self-funded projects) allocates \$901.5 million, or 86% of the total budget, to preserve the city's existing infrastructure. A total of \$147.2 million, or 14%, is allocated to expand public facilities. Expansion projects primarily include economic development related projects and new street and sewer construction projects. Preservation projects include maintenance and replacement of existing systems and facilities.

Figure 6



#### SIX YEAR CAPITAL PLAN BY FUNCTION

The following sections of this document provide an overview of the 2003-2008 Capital Improvements Plan by function. An analysis of each project category is provided, including the major initiatives and program changes brought about by the 2003 adopted capital budget as well as those proposed in the 2004-2008 capital plan.

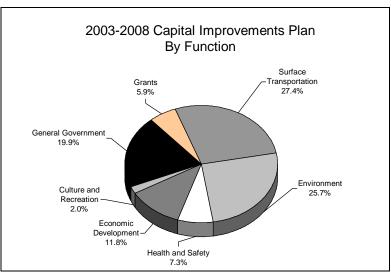
Figure 7 provides a breakdown of the plan by its seven functional areas, including surface transportation, environment, health and safety, economic development, culture and recreation, general government, and intergovernmental grants and aid.

Surface transportation projects make up the largest component of the six-year plan, 27.4%. Funding for environmental proj-

ects constitute the second largest functional area at 25.7% of total funding. The smallest functional area is culture and recreation, which includes funding for libraries and totlots and amounts to about 2.0% of total funding.

The grants category includes the grant fund that provides funding authority to receive grants not

Figure 7



previously budgeted. Grants and fringe benefits specifically identified to projects are included in their respective functional area. The grand total includes city funded projects, the Parking Fund, Milwaukee Water Works, the Sewer Maintenance Fund, and grants and aid. Table 2 (see page 15) summarizes capital projects in the six-year plan by functional area.

#### SIX-YEAR CAPITAL PLAN BY DEPARTMENT

Table 3 (see page 16) shows the 2003-2008 Capital Improvements Plan by Department. The table also shows totals for city funded capital improvement projects, as well as for self-funded projects, including the Parking Program, the Sewer Mainte-

nance Fund and the Milwaukee Water Works (which are not funded directly by property taxes). Specific capital projects and funding amounts are shown in the appropriate functional category in the next six sections of this document.

Table 2
2003-2008 Capital Improvements Plan by Function

	2003	2004	2005	2006	2007	2008	TOTAL
	ADOPTED	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET	SIX-YEAR
FUNCTIONAL AREA	BUDGET	PLAN	PLAN	PLAN	PLAN	PLAN	PLAN
SURFACE TRANSPORTATION							
Streets	\$46,450,135	\$21,840,090	\$25,144,000	\$21,598,890	\$25,128,000	\$24,048,890	\$164,210,005
Alleys	2,489,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	14,989,000
Bridges	9,737,000	10,400,000	4,495,000	5,280,000	3,950,000	8,750,000	42,612,000
Street Accessories	6,433,000	7,046,639	7,291,581	7,477,246	7,572,348	7,689,136	43,509,950
Sidewalks	2,300,000	2,300,000	2,300,000	2,300,000	2,300,000	2,300,000	13,800,000
Parking	1,661,000	1,395,000	1,240,000	1,555,000	1,625,000	850,000	8,326,000
Subtotal	\$69,070,135	\$45,481,729	\$42,970,581	\$40,711,136	\$43,075,348	\$46,138,026	\$287,446,955
ENVIRONMENT							
Sewer System	\$23,159,000	\$24,909,000	\$24,909,000	\$26,909,000	\$28,073,000	\$30,073,000	\$158,032,000
Water System	14,900,000	15,070,000	15,496,400	15,482,388	16,078,247	16,309,271	93,336,306
Sanitation	1,354,000	800,000	800,000	1,200,000	1,000,000	1,000,000	6,154,000
Forestry	979,485	841,000	841,000	861,000	901,000	901,000	5,324,485
Environmental Remediation	641,400	2,085,000	996,900	777,200	858,100	892,400	6,251,000
Subtotal	\$41,033,885	\$43,705,000	\$43,043,300	\$45,229,588	\$46,910,347	\$49,175,671	\$269,097,791
HEALTH AND SAFETY							
Fire	\$5,105,000	\$5,395,000	\$6,415,000	\$4,525,000	\$4,915,000	\$3,375,000	29,730,000
Police	7,571,793	10,290,293	8,745,679	4,913,072	4,675,000	4,735,000	40,930,837
Public Health	1,129,700	1,128,900	1,038,500	1,077,200	1,020,600	1,032,000	6,426,900
Subtotal	\$13,806,493	\$16,814,193	\$16,199,179	\$10,515,272	\$10,610,600	\$9,142,000	\$77,087,737
ECONOMIC DEVELOPMENT							
TID	\$14,000,000	\$14,000,000	\$14,500,000	\$14,700,000	\$14,700,000	\$14,700,000	\$86,600,000
Development District Funds	1,850,000	1,850,000	1,850,000	1,850,000	1,850,000	1,850,000	11,100,000
Business Improvement	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	6,000,000
Port of Milwaukee	2,000,000	3,175,000	2,700,000	3,450,000	2,400,000	6,275,000	20,000,000
Subtotal	\$18,850,000	\$20,025,000	\$20,050,000	\$21,000,000	\$19,950,000	\$23,825,000	\$123,700,000
CULTURE AND RECREATION							
Libraries	\$990,000	\$3,815,000	\$5,740,000	\$4,635,000	\$1,245,000	\$675,000	\$17,100,000
Recreational Facilities	530,000	689,200	717,000	663,000	694,500	667,500	3,961,200
Pabst and Art Fund	25,000	25,000	25,000	25,000	25,000	25,000	150,000
Subtotal	\$1,545,000	\$4,529,200	\$6,482,000	\$5,323,000	\$1,964,500	\$1,367,500	\$21,211,200
GENERAL GOVERNMENT							
Maintenance and Remodeling	\$22,124,820	\$27,668,480	\$15,621,600	\$19,280,900	\$15,106,400	\$15,023,800	\$114,826,000
Underground Conduits and Manholes	760,000	760,000	760,000	760,000	760,000	760,000	4,560,000
Communications and Control	626,000	645,000	664,000	684,000	704,000	725,000	4,048,000
Capital Equipment	4,968,000	5,662,400	6,246,800	6,831,200	7,415,600	8,000,000	39,124,000
Other Projects	1,000,000	2,390,000	8,165,000	9,300,000	12,500,000	12,500,000	45,855,000
Subtotal	\$29,478,820	\$37,125,880	\$31,457,400	\$36,856,100	\$36,486,000	\$37,008,800	\$208,413,000
GRANT AND AID	\$10,300,000	\$10,300,000	\$10,300,000	\$10,300,000	\$10,300,000	\$10,300,000	\$61,800,000
GRAND TOTAL	\$184,084,333	\$177,981,002	\$170,502,460	\$169,935,096	\$169,296,795	\$176,956,997	\$1,048,756,683

# Table 3 2003-2008 Capital Improvements Plan by Department

DEPARTMENT	2003 ADOPTED BUDGET	2004 BUDGET PLAN	2005 BUDGET PLAN	2006 BUDGET PLAN	2007 BUDGET PLAN	2008 BUDGET PLAN	TOTAL SIX-YEAR PLAN
CITY FUNDED CAPITAL PROJECTS							
Special Projects	\$11,325,000	\$12,325,000	\$18,490,000	\$19,625,000	\$22,825,000	\$22,825,000	\$107,415,000
Department of Administration	811,500	390,000	0	0	0	0	1,201,500
City Attorney	0	0	0	0	0	0	0
City Treasurer	0	0	0	0	0	0	0
Common Council City Clerk	0	0	0	0	0	0	0
Department of City Development	16,850,000	16,850,000	17,350,000	17,550,000	17,550,000	17,550,000	103,700,000
Comptroller	0	0	0	0	0	0	0
Fire Department	5,105,000	5,395,000	6,415,000	4,525,000	4,915,000	3,375,000	29,730,000
Health Department	1,129,700	1,128,900	1,038,500	1,077,200	1,020,600	1,032,000	6,426,900
Library	990,000	3,815,000	5,740,000	4,635,000	1,245,000	675,000	17,100,000
Municipal Court	0	0	0	0	0	0	0
Neighborhood Services	260,000	0	0	0	0	0	260,000
Police Department	4,571,793	10,290,293	8,745,679	4,913,072	4,675,000	4,735,000	37,930,837
Grant and Aid	3,000,000	0	0	0	0	0	3,000,000
Port of Milwaukee	400,000	2,275,000	1,100,000	950,000	800,000	3,425,000	8,950,000
Grant and Aid	1,600,000	900,000	1,600,000	2,500,000	1,600,000	2,850,000	11,050,000
DPW-Administrative Services	626,000	1,795,000	664,000	684,000	704,000	725,000	5,198,000
DPW-Operations	29,526,205	36,596,080	25,223,300	29,613,300	25,975,600	26,484,700	173,419,185
DPW-Infrastructure	35,533,185	31,035,084	31,274,681	28,972,891	31,348,598	30,233,781	188,398,220
Grant and Aid	36,094,950	17,220,645	14,624,900	14,352,245	15,434,750	20,387,245	118,114,735
TOTAL CITY FUNDED CAPITAL PROJECTS	\$107,128,383	\$121,895,357	\$116,041,160	\$112,545,463	\$111,058,798	\$111,060,481	\$679,729,642
TOTAL GRANT AND AID	\$40,694,950	\$18,120,645	\$16,224,900	\$16,852,245	\$17,034,750	\$23,237,245	\$132,164,735
NON-CITY FUNDED CAPITAL PROJECTS							
Parking	\$1,661,000	\$1,395,000	\$1,240,000	\$1,555,000	\$1,625,000	\$850,000	\$8,326,000
Milwaukee Water Works	14,900,000	15,070,000	15,496,400	15,482,388	16,078,247	16,309,271	93,336,306
Sewer Maintenance Fund	19,700,000	21,500,000	21,500,000	23,500,000	23,500,000	25,500,000	135,200,000
TOTAL NON-CITY-FUNDED CAPITAL PROJECTS	\$36,261,000	\$37,965,000	\$38,236,400	\$40,537,388	\$41,203,247	\$42,659,271	\$236,862,306
GRAND TOTAL CAPITAL INVESTMENT	\$184,084,333	\$177,981,002	\$170,502,460	\$169,935,096	\$169,296,795	\$176,956,997	\$1,048,756,683

Table 4
2003-2008 Capital Improvements Plan by Funding Source

DEPARTMENT	2003 ADOPTED BUDGET	2004 BUDGET PLAN	2005 BUDGET PLAN	2006 BUDGET PLAN	2007 BUDGET PLAN	2008 BUDGET PLAN	TOTAL SIX-YEAR PLAN
TOTAL CAPITAL IMPROVEMENTS PLAN	\$184,084,333	\$177,981,002	\$170,502,460	\$169,935,096	\$169,296,795	\$176,956,997	\$1,048,756,683
LESS:							
Enterprise Funds (Parking, Water, Sewer)	36,261,000	37,965,000	38,236,400	40,537,388	41,203,247	42,659,271	236,862,306
Special Assessments	7,955,400	6,650,900	7,382,300	6,572,250	7,454,500	6,731,740	42,747,090
Cash Revenues	9,600,000	9,600,000	9,783,000	9,600,000	9,600,000	9,600,000	57,783,000
Tax Incremental Districts	14,000,000	14,000,000	14,500,000	14,700,000	14,700,000	14,700,000	86,600,000
Grant and Aid	40,694,950	18,120,645	16,224,900	16,852,245	17,034,750	23,237,245	132,164,735
Infrastructure Cash Financed	12,177,510	12,701,141	14,588,581	13,740,246	14,886,848	13,997,636	82,091,962
As a Percent of Total Infrastructure Funding	91.04%	95.52%	100.00%	100.00%	100.00%	100.00%	
Compared to Percent Required by Resolution	91.04%	95.52%	100.00%	100.00%	100.00%	100.00%	
Infrastructure Debt Financed	1,198,490	595,698	0	0	0	0	1,794,188
REMAINING EXPENDITURES TO BE FINANCED	\$62,196,983	\$78,347,618	\$69,787,279	\$67,932,967	\$64,417,450	\$66,031,105	\$408,713,402
Cash	3,410,293	3,917,381	3,489,364	3,396,648	3,220,873	3,301,555	20,736,114
Debt	58,786,690	74,430,237	66,297,915	64,536,319	61,196,578	62,729,550	387,977,288
SUMMARY OF FINANCING SOURCES							
Tax Levy Supported Debt	\$59,985,180	\$75,025,935	\$66,297,915	\$64,536,319	\$61,196,578	\$62,729,550	\$389,771,476
Tax Incremental Districts	14,000,000	14,000,000	14,500,000	14,700,000	14,700,000	14,700,000	86,600,000
Special Assessments	7,955,400	6,650,900	7,382,300	6,572,250	7,454,500	6,731,740	42,747,090
Cash Revenues	9,600,000	9,600,000	9,783,000	9,600,000	9,600,000	9,600,000	57,783,000
Tax Levy	15,587,803	16,618,522	18,077,945	17,136,894	18,107,721	17,299,191	102,828,076
TOTAL CITY FUNDING	\$107,128,383	\$121,895,357	\$116,041,160	\$112,545,463	\$111,058,798	\$111,060,481	\$679,729,642
Enterprise Funds (Parking, Water, Sewer)	36,261,000	37,965,000	38,236,400	40,537,388	41,203,247	42,659,271	236,862,306
Grant and Aid	40,694,950	18,120,645	16,224,900	16,852,245	17,034,750	23,237,245	132,164,735
TOTAL CAPITAL INVESTMENT	\$184,084,333	\$177,981,002	\$170,502,460	\$169,935,096	\$169,296,795	\$176,956,997	\$1,048,756,683

Note: Totals may not sum due to rounding.

\*Does not reflect a PDAF withdrawal of \$5 million.

## **SURFACE TRANSPORTATION**

Capital improvements that support surface transportation consist of projects involving streets, alleys, bridges, street accessories, sidewalks, and parking structures. The objective of the surface transportation capital program is to provide safe, attractive, and efficient surface public ways and infrastructure systems. Funding for these systems is determined primarily through the use of condition criteria, including age, structural adequacy, maintenance problems, construction projects, citizen complaints, and aldermanic requests. These criteria are used to assess the condition of the infrastructure system, plan budgets in a costeffective manner, and predict annual preservation effort requirements.

Surface transportation capital programs contribute to the city's strategic goals of strengthening the local economy and maintaining quality neighborhoods by providing a safe, well-maintained, and efficient transportation system. This system helps to promote economic activity and development including attracting and retaining family supporting jobs.

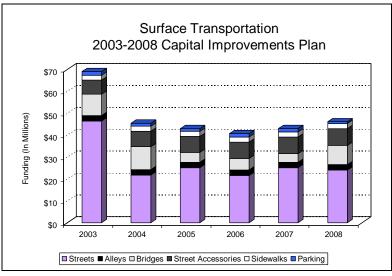
Major components of the city's surface transportation system include:

- 1,416 miles of streets (including freeways, arterials, and residential streets);
- 415 miles of alleys servicing neighborhoods throughout the city;
- 217 city maintained bridges (711 bridges within the city limits); and
- 5 parking structures.

Other components include lights for alleys and streets, traffic signs, traffic signals, and crosswalks. A detailed inventory of assets as of December 31, 2001 appears at the end of this document.

Surface transportation projects are funded through special assessments, federal/state grants and aids, revenue from developers, city borrowing, and property tax levy. Surface transportation projects total \$287.4 million, or 27.4% of the total six-year capital improvement plan. Figure 8 shows the 2003-2008 plan for these projects. Specific program

Figure 8



funding levels are detailed in Table 5 at the end of this section.

The 2003 adopted budget provides \$69.1 million in funding for surface transportation projects compared to \$48.3 million in 2002. Funding decreases after 2003 because the state government, which funds and schedules many projects, has proposed fewer street and bridge projects resulting in a decrease in the amount of grants and aids. This decrease is further explained below.

#### Streets

The city's street network includes 1,416 miles of freeways, highways, arterials, collectors, and local roads. Of this amount, 121 miles are the responsibility of other units of government including federal, state, and county roads; Port of Milwaukee roads, and Water Department roads. City arterials, collectors, and local roads are primarily composed of asphalt or concrete. Other materials used include crushed rock and gravel, brick, granite block, and macadam. Macadam consists of layers of small stone held together with tar or asphalt emulsion.

The city's streets are in good condition as measured by a standard Pavement Quality Index (PQI). On a scale of two to ten, minimum standards are

4.0 for local streets, 4.5 for collectors, 5.0 for minor arterials, and 5.5 for major arterials. As Figure 9 indicates, the vast majority of local streets, 75.5% are rated above the 4.0 minimum. The other, more heavily traveled street types also substantially exceed their minimum ratings. Preserving this high quality street system is the objective of the streets' capital programs.

Most streets classified as arterial and collector are designated as part of the Federal Aid Transportation System and are eligible for county, state, and/or federal funding. The State of Wisconsin also funds the Local Road Improvement Program, which assists the city in financing needed improvements to its local residential street system. County, state, and fed-

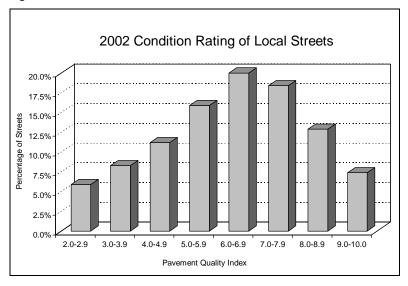
eral funds assist the city with financing the costs of street resurfacing and reconstruction under the major street improvements program.

Streets that do not qualify for county, state, or federal funding are financed under the regular street reconstruction and resurfacing program. These projects are funded through the capital budget with a portion of the costs recovered through special assessments levied against abutting properties.

Street related capital improvement projects account for the largest portion, 57.1%, of the surface transportation plan. The six-year plan includes \$164.2 million for street improvements. However, only \$47.2 million represents city resources. Federal, state, county grants and aids, special assessments, and revenue from developers provide the remaining funding. In the six-year plan, grants and aids are expected to total \$91.2 million, or 55.6% of total funding for street related capital improvement projects. Special assessments total \$23.4 million and developer revenue totals \$2.4 million.

Street related projects include major street improvements such as state and/or federal aided street reconstruction and resurfacing, street resurfacing by contract, new street construction, and developer financed streets. As Figure 8 illustrates, funding for streets peaks in 2003 at \$46.5 million. The peak is due to the reconstruction and extension of West Canal Street, funded in 2003 at approximately \$10 million. Other major projects over the course of the 2003-2008 plan include reconstruction of North Teutonia Avenue from West Ruby Ave-

Figure 9



nue to West Villard Avenue; West Silver Spring Drive from North 27<sup>th</sup> Street to North 68<sup>th</sup> Street; West Greenfield Avenue from South 1st Street to South 6th Street; and North 91<sup>st</sup> Street from West Brown Deer Road to West County Line Road.

#### **Alleys**

The city's 415 miles of alleys are constructed of asphalt, brick, macadam, and other materials. Resurfacing and reconstruction projects are funded through the capital budget. A portion of program costs are recovered through special assessments levied against adjacent properties.

Alleys are visually inspected on a three year cycle to determine their condition. Other inputs include citizen complaints and aldermanic requests. The Department of Public Works is developing a system similar to the street PQI for alleys. Critical features of alley condition include surface defects, prior crack filling, the condition of patches, and surface grade for water runoff. Alleys recommended for reconstruction or resurfacing are placed on the alley paving program. Since property owners pay a relatively high proportion of alley projects through special assessments, alleys tend to reach a higher level of deterioration before projects receive approval at public hearings.

The 2003-2008 Capital Improvements Plan provides \$15 million, or 5.2% of total surface transportation funding to finance reconstruction and resurfacing of city alleys. Almost 60%, \$8.8 million, of alley project costs are charged to abutting property

owners through special assessments. Figure 8 shows that funding for this purpose is virtually constant over the six-year plan at \$2.5 million per year.

#### **Bridges**

Of the 711 bridges located in the city, 460 are maintained by the state, 35 are the responsibility of the county, and the remaining 217 are maintained by the city. The bridges are inspected on a two year cycle, with those having lower condition ratings being inspected more frequently.

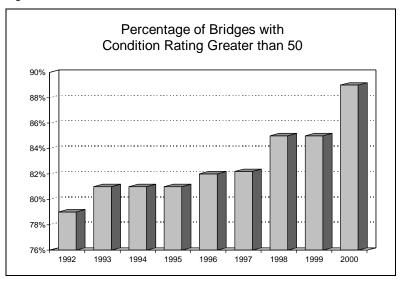
Bridge condition is rated using a scale utilized by the Federal Highway Administration and the Wisconsin Department of Transportation to determine grant and aid funding. Each bridge receives a rating

between 0 (major structural deficiencies) and 100 (excellent condition and constructed to current standards). A bridge rated over 80 is considered to be in good condition and has no major deficiencies. Should the sufficiency rating fall below 50, the bridge qualifies for bridge replacement grant funds. Bridges with sufficiency ratings below 80 may be eligible for rehabilitation grant funding. As shown in Figure 10, 89% of the city's 217 bridges are rated at or above 50.

Funding for bridge projects accounts for \$42.6 million, or 14.8% of total funding provided in the sixyear plan. Figure 8 shows that funding for bridges peak in 2004 at \$10.4 million. In the six-year plan, \$26.9 million, or 63.1% of total funding for bridges is received from federal and state transportation aids.

Some of the major state projects funded in the 2003-2008 plan include construction of the West Canal Street Bridge over the Menomonee River and Canadian Pacific Railway; replacement of the West Highland Boulevard Bridge over the C. P. Rail Systems railroad; renovation of the State Street, Kilbourn Street, and West Cherry Street bascule bridges over the Milwaukee River; replacement of the North Sherman Boulevard Bridge over Lincoln Creek; and replacement of the West Forest Home Avenue Bridge over the Kinnickinnic River.

Figure 10



#### **Street Lighting and Traffic Control**

This category includes street lighting and traffic control facilities. Street lighting capital needs are determined based on: (1) the paving program, (2) historical record of circuit problems, (3) aldermanic and citizen requests, (4) traffic and pedestrian safety, (5) incidence of crime, and (6) lighting standards. Engineering standards for new street light installations are based on cost, traffic volume, roadway construction material, and the need to improve traffic safety and reduce crime. As of December 2000, 96.7% of lighted streets met these engineering standards.

Aspects of the street lighting program include improvements related to the street reconstruction program, street lighting substation repair and control circuit replacement, street lighting conversion to more efficient and higher illumination lighting, and the specialty lighting projects.

Traffic control devices (signals, signs, crosswalks, etc.) are evaluated based on age and condition, traffic and pedestrian volume, accident experience, and state and federal requirements. The city is compliant with federal standards and remains committed to providing controls in areas of special needs.

Signals are initially placed per special request or traffic study and replaced as necessary during street reconstruction. Signs are placed in conjunction with pedestrian and school sign upgrades, street reconstruction projects, and to meet changing traffic needs.

In 2003, the multi-year Emergency Response Management Program will be completed. Devices are installed at intersections on major streets to detect Fire Department emergency vehicles and then advance or hold the desired green traffic signal to allow the vehicle to pass through the intersection. Approximately 325 intersections will be equipped with these devices when the program is completed.

The six-year plan includes approximately \$43.5 million for the street lighting traffic control programs, which accounts for 15.1% of total funding. Funding for this purpose is steady throughout the six-year plan. The 2003 adopted budget provides \$6.4 million for these programs.

#### **Sidewalks**

Sidewalks provide pedestrians with a safe means of travel throughout the city. Sidewalks are designated for replacement based on their (1) age and condition, (2) associated street, water, or sewer construction projects, (3) citizen complaints, and (4) handicapped accessibility. All sidewalks are periodically inspected. Approximately 430,000 square feet of sidewalk is replaced annually through utility replacement and sidewalk repair contracts. This level of sidewalk replacement is able to maintain the system in good to excellent condition.

Funding for sidewalks and other pedestrian related projects in the six-year plan totals \$13.8 million and accounts for 4.8% of total surface transportation funding. Funding of \$2.3 million is provided in the 2003 adopted budget.

#### **Parking**

The city owns and operates five parking structures through the Parking Fund. One of the five, the Milwaukee and Michigan parking structure, is leased to a local business. The city is responsible for its capital repairs and maintenance. Four other structures are operated using contracted parking companies. The city receives revenues from these contractors. In addition, the city has title to five other structures through the Redevelopment Authority.

Parking staff developed and annually reviews a long term capital maintenance plan in order to ensure proper maintenance of fund facilities, in particular, its parking structures. Four structures are rated in "good" condition. The Milwaukee/Michigan structure was renovated in 2001. The 2nd and Plankinton structure was extensively renovated in the late 1990's. The MacArthur Square structure had phased replacement of various structural and mechanical components in the mid-1990's. The newest structure, 1000 North Water, was built in 1991 and has been carefully maintained.

The 4th and Highland structure is rated "fair" due to ongoing column settling problems resulting from the Milwaukee Metropolitan Sewerage District (MMSD) Deep Tunnel Project. These issues are being addressed during the 2003-2008 plan.

The 2003-2008 Capital Improvements Plan includes \$8.3 million for parking related projects. This accounts for 2.9% of total surface transportation funding. Funding of \$1.7 million is provided in the 2003 adopted budget. These projects will be financed with Parking Fund revenues.

The 2003 budget provides \$225,000 for improvements associated with the lease of a facility to consolidate parking enforcement and tow dispatch desk functions. This facility will provide adequate space for over 90 employees and approximately 60 vehicles involved in parking enforcement. The central location will increase operational efficiency by streamlining supervisory duties, provide adequate meeting and locker areas for parking checkers and other employees, and allow vehicles to obtain fuel and be washed on site.

During the plan, the MacArthur Square Parking Structure will have its waterproof traffic membrane replaced. A three year project, this will prevent concrete spalling and reinforcement bar deterioration. The structure's stairs will be repaired and the basement painted.

The 1000 North Water structure will have waterproof traffic membrane reapplied in areas experiencing deterioration. Other work includes drain pipe repacking, expansion joint replacement, and deck sealing. The Milwaukee and Michigan structure will have its waterproof traffic membrane replaced in 2005 at the end of its useful life. A two year project to repaint the structure is scheduled for 2006 and 2007. The structure was last repainted in 1997.

The 4th and Highland structure will have the spanrel beams and expansion joints recaulked in 2007. This is a periodic follow-up to preserve the joints replaced in 2001 and 2002. The 2nd Street and Plankinton structure received extensive repairs and improvements in the mid- to late- 1990's. Much of the concrete slab work had an expected life of 10 to 15 years. The 2003-2008 plan includes concrete slab repairs in 2007. This work will repair expected concrete delaminating, cracks, and worn deck membrane.

#### **PROGRAM CHANGES AND INITIATIVES**

Implementation of New Pavement Condition Index: In 2000, the city hired a consultant to inventory all streets in the City of Milwaukee and update the Pavement Management Administration (PMA) Database. Data collection was completed in late 2000 and all data was input into the PMA computer model. Most of 2001 was spent recalibrating the model to most accurately reflect the existing field conditions and the state of the city's street system. Figure 9 represents the state of the system as of 2002 for those streets that are city maintained. This computer model is intended to predict pavement quality and life and the need for repair more accurately than the prior system. Time and monitoring of PMA outputs compared to actual field conditions will be the ultimate indicator of the system's accuracy and value.

Pavement condition is measured through the Pavement Quality Index (PQI), which rates street conditions on a scale of 2 to 10. These ratings are based upon visual observations, historic records, and non-destructive testing on non-residential streets. PQI ratings are calculated for two general street categories: local and collector/arterial. Each category has a minimum acceptable PQI. A rating below the minimum indicates that the street segment requires rehabilitation or reconstruction. Based on previous street condition and age data and older, less sophisticated version of a pavement management system (PMS), minimum PQI's of 4.0

for local streets and 5.5 for collector/arterial streets were established. Collector and arterial streets have a higher minimum than local streets due to their greater importance to a larger population base in providing access to goods and services and employment.

## West Canal Street Reconstruction and Extension: The improvement and extension of West Canal Street from North City Street to the Miller Book

Street from North 6th Street to the Miller Park Baseball Stadium is scheduled to begin construction in 2003. Approximately \$6.8 million will be allocated in 2003 as the city's match to grant funding received from the state. The total city cost of the two year project will be approximately \$10 million. This project is considered vital to the redevelopment of the Menomonee Valley. Combined with the recently completed replacement of the Sixth Street Viaduct, it will also serve as an alternate travel route during the planned upcoming reconstruction of the Marquette Interchange.

Parking Revenue Control Equipment: The 2003 adopted budget includes \$969,000 to purchase replacement revenue control equipment for the city owned parking structures. Revenue control equipment consists of gates, fee computers, cash registers, and management information systems. This equipment will enable the city to process credit cards on entry to the parking structures providing enhanced customer service.

Table 5

Project Title	2003 Budget	2004 Plan	2005 Plan	2006 Plan	2007 Plan	2008 Plan	Six-Yea Plan
-	Buuget	Fian	Fian	Fian	Fian	riaii	riali
Street Improvements	<b>CO CAO OOO</b>	<b>CO 040 000</b>	£40.050.00				
Regular Streets, Net City Cost	\$3,640,000	\$2,842,000	\$3,842,000	\$2,842,000	\$3,842,000	\$2,842,000	\$19,850,00
New Street Construction, Net City Cost	656,000	351,000	351,000	351,000	351,000	351,000	2,411,00
Major Street (Federal and State Aided) Net City Cost	8,648,785	3,618,545	3,403,800	3,190,395	2,803,750	3,259,905	24,925,18
Revenue	400,000	400,000	400,000	400,000	400,000	400,000	2,400,00
Grant and Aid Assessments	28,183,950	11,242,645	13,029,900	11,508,245	13,541,750	13,729,245	91,235,73
	4,921,400	3,385,900	4,117,300	3,307,250	4,189,500	3,466,740	23,388,09
TOTAL STREET IMPROVEMENTS	\$46,450,135	\$21,840,090	\$25,144,000	\$21,598,890	\$25,128,000	\$24,048,890	\$164,210,00
Alley Program							
City Funding	\$1,220,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$6,220,0
Assessments	1,269,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	8,769,0
TOTAL ALLEY PROGRAM	\$2,489,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$14,989,0
Bridge Program							
Net City Cost	\$1,826,000	\$4,422,000	\$2,717,000	\$2,436,000	\$2,057,000	\$2,092,000	\$15,550,0
Revenue	0	0	183,000	0	0	0	183,0
Grant and Aid	7,911,000	5,978,000	1,595,000	2,844,000	1,893,000	6,658,000	26,879,0
TOTAL BRIDGE PROGRAM	\$9,737,000	\$10,400,000	\$4,495,000	\$5,280,000	\$3,950,000	\$8,750,000	\$42,612,0
Street Lighting Program							
City Funding	\$5,104,000	\$5,849,639	\$6,084,581	\$6,260,246	\$6,355,348	\$6,472,136	\$36,125,9
Assessments	500,000	500,000	500,000	500,000	500,000	500,000	3,000,0
TOTAL STREET LIGHTING PROGRAM	\$5,604,000	\$6,349,639	\$6,584,581	\$6,760,246	\$6,855,348	\$6,972,136	\$39,125,9
Traffic Control Program	40,000,000	<b>4</b> 0,010,000	**,****	<b>4</b> 2,100,210	<b>4</b> 2,222,212	¥0,01=,100	***,:==,*
Traffic Control Improvements	\$682,000	\$697,000	\$707,000	\$717,000	\$717,000	\$717,000	\$4,237,0
Emergency Response Mgmt	147,000	000,1600	0	0	0	0	147,0
TOTAL TRAFFIC CONTROL PROGRAM	\$829,000	\$697,000	\$707,000	\$717,000	\$717,000	\$717,000	\$4,384,0
	\$629,000	\$697,000	\$707,000	\$717,000	\$717,000	\$717,000	φ4,364,0
Sidewalk Program	£4.005.000	£4 005 000	£4 005 000	£4 005 000	£4 005 000	£4 005 000	<b>CC 040 0</b>
City Funding Assessments	\$1,035,000	\$1,035,000 1,265,000	\$1,035,000 1,265,000	\$1,035,000 1,265,000	\$1,035,000 1,265,000	\$1,035,000 1,265,000	\$6,210,0 7,590,0
TOTAL SIDEWALK PROGRAM	1,265,000						
	\$2,300,000	\$2,300,000	\$2,300,000	\$2,300,000	\$2,300,000	\$2,300,000	\$13,800,0
Parking Program							
2nd and Plankinton Traffic Membrane	\$217,000	\$217,000	\$0	\$0	\$0	\$0	\$434,0
Replace Revenue Control Equipment - Four Structures	969,000	0	0	0	0	0	969,0
Consolidated Facility for Parking Enforcement	225,000	0	0	0	0	0	225,0
MacArthur Square Stair Repair and Basement Painting	0	175,000	0	0	0	0	175,0
MacArthur Square Remembrane Project	0	460,000	375,000	405,000	0	0	1,240,0
1000 North Water - Membrane Replacement	0	193,000	0	0	0	0	193,0
1000 North Water - Drain Pipe Repacking	0	100,000	0	0	0	0	100,0
1000 North Water - Joint Replacement	0	0	280,000	0	0	0	280,0
Milwaukee/Michigan - Remembrane Project	0	0	335,000	0	0	0	335,0
Milwaukee/Michigan Repainting	0	0	0	950,000	950,000	0	1,900,0
4th and Highland Recaulking	0	0	0	0	475,000	0	475,0
1000 North Water Deck Sealing	0	0	0	0	0	550,000	550,0
2nd and Plankinton Concrete Slab Repairs	0	0	0	0	0	100,000	100,0
Miscellaneous Repairs and Upgrades	125,000	125,000	125,000	100,000	100,000	100,000	675,0
Structural Repairs to Various Structures	125,000	125,000	125,000	100,000	100,000	100,000	675,0
TOTAL PARKING PROGRAM	\$1,661,000	\$1,395,000	\$1,240,000	\$1,555,000	\$1,625,000	\$850,000	\$8,326,0
SURFACE TRANSPORTATION TOTALS							
City Funding	\$22,958,785	\$19,815,184	\$19,140,381	\$17,831,641	\$18,161,098	\$17,769,041	\$115,676,1
Assessable	7,955,400	6,650,900	7,382,300	6,572,250	7,454,500	6,731,740	42,747,0
Revenue	400,000	400,000	583,000	400,000	400,000	400,000	2,583,0
Grant and Aid	36,094,950	17,220,645	14,624,900	14,352,245	15,434,750	20,387,245	118,114,7
Enterprise (Parking Fund)	1,661,000	1,395,000	1,240,000	1,555,000	1,625,000	850,000	8,326,0
TOTAL	\$69,070,135	\$45,481,729	\$42,970,581	\$40,711,136	\$43,075,348	\$46,138,026	COO7 44C C

### **ENVIRONMENT**

Environment related capital projects include the sewer system, water facilities, sanitation, forestry, and environmental remediation. The objective of the environmental capital program is to enhance the long term environmental health of Milwaukee by reducing lake and river pollution, protecting human health and the local ecosystem, and maintaining the cleanliness and beauty of city Funding for environmental neighborhoods. projects is determined by a wide range of criteria including: condition, age, maintenance problems, state and environmental regulations, citizen complaints, and aldermanic requests. When possible, replacement of environment related infrastructure is coordinated with the paving program.

Environmental capital programs contribute to attaining the city's strategic goals by improving environmental health, strengthening the local economy, and enhancing the value of Milwaukee's neighborhoods. High quality water service and a safe and effective sewer system help to enhance the city's attractiveness for private sector, supporting residential, industrial, and commercial development. The Forestry Program creates stronger neighborhoods by improving the local environment and making the city an attractive place to live. The Sanitation and Environmental Remediation Programs improve the environmental health of Milwaukee and the personal health of its citizens.

Environmental projects are funded through city borrowing, special assessments, revenue from developers, user fees, and the property tax levy. The 2003-2008 Capital Improvements Plan provides \$269.1 million for environment related capital projects, the second largest functional category representing 25.7% of total funding in the six-year plan. Figure 11 shows projected costs of environment-related capital projects. Specific program funding levels are detailed in Table 6 located at the end of this section.

Major components of the city's environmental system include:

- 2,428 miles of sewers
- 1,953 miles of water mains

- 2 water purification plants
- 120 miles of landscaped boulevards
- Over 200,000 trees on city right-of-ways and property

A detailed inventory of assets as of December 31, 2001 appears at the end of this document.

Funding gradually increases over the course of the six year plan, largely due to increases in water main and sewer relief and relay replacement funding.

#### **Sewers**

The Sewer Program provides for maintenance of the current sewer network, expansion of sewer capacity, and developer financed sewer expansion. The Department of Public Works Infrastructure Services Division is responsible for constructing and maintaining the city's sewer system including storm and sanitary sewers, storm water inlets, catch basins and manholes.

Sanitary sewers carry sanitary flow to intercepting sewers that carry the flow to sewage treatment facilities. Storm sewers carry surface drainage from parking lots, roofs, and streets to rivers or the lake. Combined sewers carry both sanitary flow and storm water. Storm water inlets collect storm water and drain it into a storm sewer. Catch basins, 8-foot deep underground tanks, collect debris from

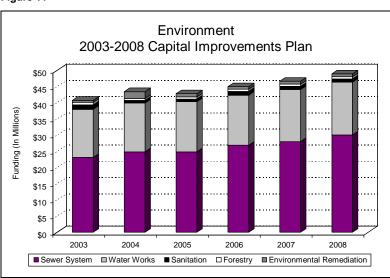


Figure 11

storm water runoff and drain it either into a combined or storm sewer. Manholes provide access to the sewer system.

This system of collector, sanitary, and combined sewers empties into the sewer system of the Milwaukee Metropolitan Sewerage District (MMSD). MMSD is a special purpose municipal corporation that operates a network of interceptor sewers and two sewer treatment plants. It also provides sewerage treatment services to a large number of municipalities in the metropolitan area.

The goal of the Sewer Program is to ensure that the city's sewer infrastructure remains structurally sound, properly maintained, and capable of handling adequate volumes of waste water and storm water. Information on the condition of sewers is gathered primarily through sewer inspections. These inspections are largely performed using remote video cameras. Sewers are examined prior to all paving projects, when backwater complaints are received, or as part of the systematic periodic review program. When a segment of sewer is inspected, it is rated based upon the following criteria: (1) improvements needed to comply with federal, state, or district mandates; (2) structural condition; (3) hydraulic performance including back water complaints; (4) reported cleaning and maintenance problems; and (5) aldermanic requests.

Historically, Infrastructure Services has remotely viewed an average of 633,000 feet and visually inspected an average of 125,000 feet of sewer annually. At this rate of inspection, each sewer segment would be inspected every 17 years. Based upon these inspections and other inputs, sewers that have an index rating of 65 or less on a 0 to 100 scale will be scheduled for replacement.

The six-year plan includes \$158 million for sewer system projects, which accounts for 58.7% of total funding for environment related projects. The program includes the following: (1) the Sewer Maintenance Relay Program; (2) the Expansion of Capacity Program; (3) the Sewer Debris Dewatering Site(s); and (4) the Developer Financed Sewer Program. The Relief and Relay Program, including the Sewer Debris Dewatering Project, has been financed with a user fee since the year 2000. The Expansion of Capacity Program is funded through the tax levy and tax levy supported debt. Developers finance new sewers constructed for specific development projects.

Sewer Maintenance Relay Program: The 2003-2008 Capital Improvements Program provides \$135 million for the Sewer Maintenance Relay Program. This level of funding is expected to replace 10 to 15 miles of sewers annually. The 2003 budget provides approximately \$975,000 to replace sewer mains associated with the paving program and \$16.9 million in relay projects to resolve structural, hydraulic, or backwater problems. A reserve for revenue bonds issued makes up the remaining \$1.6 million. The increased funding over time reflects anticipated increases in construction costs.

**Expansion of Capacity Sewer Program:** The 2003-2008 plan provides approximately \$19.8 million in funding for expansion of capacity sewer projects. Approximately \$17.5 million is provided to construct new large diameter relief sewers, which provide additional capacity to the sewer system in order to ensure that sewers are sufficient to handle demand.

The remaining \$2.3 million is provided to extend sewer service to areas of the city that do not currently have service. These extensions may occur in either established or undeveloped areas of the city because of failing septic systems, surface flooding problems, paving of a local street, or requests by abutting property owners. These sewer extensions are financed in part through special assessments levied against the owners whose properties will benefit from the new sewer system.

**Developer Financed Sewers:** The 2003-2008 plan provides \$3 million for developer financed sewers. Developer financed construction occurs when a private developer requests that the city extend sewer service to the developer's lands or when the development requires modifications to the existing system.

#### **Water Works**

The Milwaukee Water Works is a public utility owned by the City of Milwaukee and regulated by the Wisconsin Public Service Commission. It is responsible for constructing, operating, and maintaining facilities and equipment used to collect, filter, treat, store, pump, and distribute water to Milwaukee area residents. The primary objective of the Milwaukee Water Works is to provide potable and palatable water in quantities sufficient to meet domestic consumption and fire protection needs while enhancing the long term economic and environmental health of the city.

To accomplish this objective, the utility has an extensive infrastructure system consisting of treatment plants, pumping stations, storage facilities, water mains, hydrants, meters, and valves. A detailed inventory of these facilities is included at the end of this document.

Various criteria are used to assess the condition of this infrastructure and to plan ongoing capital improvements. Water Engineering staff utilize a Water Main Break Experience Index to rank water main replacement projects on the basis of frequency. Other factors include: (1) water quality considerations; (2) types of main breaks; (3) potential damage from future breaks; (4) adequacy of existing mains; and (5) the paving program.

Other components of the water system such as treatment facilities, pumping stations, and storage facilities have a different set of criteria. They include: (1) the ability to optimize operation of the facility; (2) maintenance history; (3) pressure or flow considerations; (4) water quality standards; and (5) growth and development.

The City of Milwaukee water distribution system consists of distribution and feeder mains. Feeder mains carry water from the two purification plants to the distribution system for service to customers or to storage facilities to be repumped during periods of maximum demand. Distribution mains carry water from feeder mains to customers' service lines. The estimated useful life for water mains currently in use is about 110 years.

The Water Main Break Experience Index maintains detailed information on water main breaks throughout the system. Based on the frequency of breaks, a section of water main is programmed for replacement. The annual average of water main construction is 11.5 miles. This includes mostly main replacement with some new construction.

The two water treatment plants process raw water drawn from intakes extending into Lake Michigan. The treatment process at both plants begins with the contact of raw water with ozone, the primary disinfectant. Coagulation with aluminum sulfite settling and rapid dual media filtration follows. Free chlorine is added after filtration. A phosphorus compound is added to control lead and fluoride is added to prevent tooth decay. The final step is the addition of chloramine to maintain a disinfectant residual throughout the distribution system.

After treatment, water enters the distribution system through three primary pumping stations: (1) Riverside, (2) North Point, and (3) Howard Avenue. These are augmented throughout the system by 11 booster pumping stations to offset gradual loss of water pressure due to distance traveled, friction along the sides of the mains, and differences in elevation. The total rated pumping capacity of all primary and booster pumping stations is 1.005 billion gallons of water per day.

A reservoir, nine storage tanks, and two treatment plant clearwells provide a total storage capacity of 139 million gallons of water. These storage facilities provide excess capacity and assist in handling peak demands.

The 2003-2008 Capital Improvement Plan for the Milwaukee Water Works totals approximately \$93.3 million and accounts for 34.7% of total funding for environment related capital projects. Most of this funding, approximately \$89.7 million will come from water revenues. The remaining \$3.6 million will be received from land developers for installation of new water mains in new developments. Table 6 summarizes the capital accounts that fund water improvements.

The six-year plan provides \$64.2 million for the Water Main Program, which includes distribution and feeder mains. The distribution main program funding increases approximately 10% per year as part of an increased focus on buried infrastructure. Funding to maintain the feeder main system will replace, reinforce, and extend one mile of feeder mains each year.

The remaining \$29.1 million finances plant improvements at purification plants, pumping stations, storage facilities, and the control center. Pumping facilities improvements total \$8.7 million over the six-year plan, including replacement of the Howard Electrical Substation in 2003 for \$1 million and similar upgrades to mechanical and electrical equipment and structures. Major treatment plant projects include \$1 million in 2003 at Linnwood for treatment backup power, replacement of basin sluice gates in 2006-2008 totaling \$1.2 million, and \$2 million for coagulation basin sludge control. Other projects include control center and security upgrades and a \$600,000 multi-year flocculator system upgrade at the Howard Treatment Plant.

#### **Forestry**

The Forestry capital program maintains and improves the city's 120 miles of landscaped boulevard medians and approximately 200,000 trees on city right-of-ways and property. The trees and boulevard system add to Milwaukee's quality of life by providing aesthetic beauty and environmental benefits. The Concealed Irrigation Program installs irrigation systems and provides general landscaping for new boulevards after street construction or traffic control modifications. The Tree Planting Program plants and maintains trees located on city right-of-ways and properties including curb strips, boulevards, municipal properties, and other green spaces.

The main factor in the Forestry capital program is the city's street and sidewalk construction program. Boulevard renovation is scheduled to coincide with street reconstruction since improvements to the irrigation systems often require breaking street pavement. New or replacement trees are often needed as a result of street construction or renovation. In addition, tree mortality rates is used to determine tree replacement. Experience indicates that the average useful life of a tree located on city right-of-ways is 60 years. Using mortality rates, Forestry removes marginal trees whose condition has declined 75% to maintain a healthy urban forest.

Funding for Forestry related activities totals over \$5.3 million in the six-year capital improvements plan, which accounts for 2% of total funding for environmental projects. The Concealed Irrigation and Landscaping Program plans to expend \$2.3 million or \$381,000 annually for new and existing boulevard irrigation systems to be installed in conjunction with the city's street paving program.

The Tree Planting Program includes \$2.9 million or an average of \$481,000 per year to plant approximately 4,600 trees annually. These trees will replace deteriorated trees or be planted in conjunction with the city's paving program. This funding is intended to maintain the tree stock on Milwaukee's streets at 98% of full capacity.

In 2003, \$150,000 is allocated for improvements related to a possible consolidation of the nursery and greenhouse facilities with Milwaukee County. These funds will be utilized only after an agreement has been finalized.

#### Sanitation

The Sanitation Division provides residential garbage collection, recyclable collection, special pickups, and street and alley sweeping services from six district offices, two transfer stations, two self-help stations, and a materials recovery facility. Transfer stations are facilities where city garbage packers unload garbage onto "tipping floors". Refuse is then compacted and loaded for transport to a landfill. One transfer station is located on the south side on Lincoln Avenue and is approximately 50 years old. The second facility, Industrial Road on Milwaukee's north side, is about 20 years old. Both facilities were renovated in the mid-1990's. Each facility transfers an average 1,100 tons of garbage each day.

The self-help stations provide a place where city residents can dispose of yard waste, recyclables, bulky items, clean fill, and other types of refuse. These facilities handle 150 tons of refuse daily.

The city has a Materials Recovery Facility where all recyclables collected by the city are sorted, processed, and marketed by a private contractor. Although this facility is owned by the city, the contractor is responsible for any capital improvements until the contract expires in 2004.

In 1990 nine district headquarters were consolidated into the current six districts. Each district is responsible for garbage collection, recycling, snow and ice removal for a section of the city.

The six-year plan provides \$6.2 million for Sanitation related capital improvement projects or 2.3% of total funding for environment related capital projects. Funding for Sanitation projects ranges from \$800,000 to \$1.4 million in the six-year plan. These projects focus on improvements to the facilities and offices at the six district headquarters. In addition, the plan provides funding for roof replacement and overhead door replacement at the Material Recovery facility and seawall remediation at the 13th and Mount Vernon facility.

#### **Environmental Remediation**

The six-year capital plan for the Environmental Remediation Program provides funding to address potential environmental risks and preserve the environmental health of the city. Projects funded through the Environmental Program address asbestos abatement, lead abatement, soil remediation, and groundwater remediation at city-owned facilities.

Many city buildings were constructed prior to 1973. Lead piping, lead based paint, and asbestos building materials were commonly used in construction and maintenance during that time. Management plans for asbestos abatement in city facilities have been developed based on extensive inspections. The plans prioritize asbestos abatement projects according to hazard ratings. Where lead hazards are identified, similar action is taken.

There are 26 city owned sites that have either soil or groundwater contamination that require remediation. This contamination resulted from leaking underground storage tanks that contained petroleum products such as gasoline or diesel fuel. The contamination was found during the removal and replacement of tanks funded by the Underground Storage Tank Program in the 1980's. An ongoing remediation activity is expected to continue for 25-30 years.

Storm water pollution prevention plans have been instituted in response to a state mandate. The intent is to prevent storm water from being contaminated prior to entering the storm sewer system and

eventually rivers, canals, and Lake Michigan. Recommended improvements include placing canopies over raw materials and concrete pads under materials that are stored outside. This project will be completed by 2005.

The only remaining city operated landfill is the Hartung Quarry Landfill. It is used to dispose of "clean" construction debris generated by city crews. In 2004, it is expected to reach capacity and begin the closure process.

The 2003-2008 Capital Improvements Plan includes \$6.3 million or 2.3% of total funding for a variety of environment related capital projects. In 2004, \$1.2 million is provided for the expected closure of the Hartung Quarry Landfill. Abatement and prevention projects compose \$5.1 million or an average of \$850,000 annually. In 2003, \$176,000 will be used for asbestos abatement at city owned buildings, including the Zeidler Municipal Building basement. Another \$44,000 is dedicated to lead abatement at various sites. Soil and groundwater remediation will utilize \$257,000. Storm water prevention related projects are allocated \$164,000 including canopies and concrete pads at the Central Repair Garage and the Municipal Service Building.

#### PROGRAM CHANGES AND INITIATIVES

Cash Financing Policy for the Relay Sewer Program: The 2000 budget transferred the Relief and Relay Sewer Program from the city funded capital budget to the Sewer Maintenance Fund. As part of this transfer, a Cash Financing Program will be developed for the Relay Sewer Program. Cash financing some of this program is appropriate because it maintains the condition of the current sewer infrastructure by annually replacing a portion of the sewer system. The major advantage of cash financing is the long term savings realized through debt service avoided. This policy will balance increased costs and future savings so as to make annual fee increases manageable and acceptable. Continuing implementation of this policy, the 2003 budget will cash finance 10%, or \$1.95 million of the Sewer Maintenance Relay Program. The cash conversion policy for the Sewer Fund is to increase cash financing by 10% each year reaching 100% cash financing in the year 2012.

**Sewer Debris Dewatering Sites:** The State of Wisconsin Department of Natural Resources has re-

quired that sewer debris must be dry prior to land-fill disposal. Currently, the city has contracted to dry this material at a cost of approximately \$700,000 annually. The 2002 Sewer Fund budget included \$50,000 for a feasibility study to determine if it would be less expensive for the city to construct and operate a de-watering facility and dispose of the dry material directly at one of the DPW's Operations Transfer Stations. The 2003 budget includes \$200,000 to construct such a facility should the study conclude that city drying operations would be less expensive.

**Environment Projects Fund:** The city's remaining landfill, the Hartung Quarry Landfill, is used to dispose of clean construction debris generated by city crews. The landfill is expected to reach capacity in 2004. Funding is provided in 2003 for testing and to prepare closure plans. In 2004, \$1.2 million is provided to close and cap the landfill per Wisconsin Department of Natural Resources specifications.

### **HEALTH AND SAFETY**

The city's strategic plan includes goals of making Milwaukee safer, and improving its environmental health and the personal health of its residents. Health and safety are also critical components of two other strategic goals: a strong local economy and stable, attractive neighborhoods.

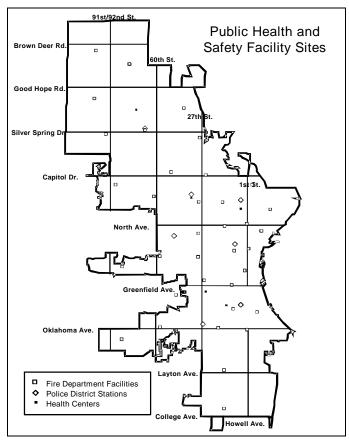
Capital projects in the health and safety category make the Fire, Police, and Health Departments - the primary providers of public health and safety services - more effective at what they do. The projects described in this section provide them with more useful, efficient, aesthetic settings for many of their interactions with Milwaukee residents.

Funding for health and safety totals \$77.1 million and accounts for 7.4% of total funding. Figure 12 shows projected funding levels for health and safety capital projects. As the remainder of this section explains, most of that funding improves facilities for the Fire, Police, and Health Departments.

Major components of the city's health and safety facilities include:

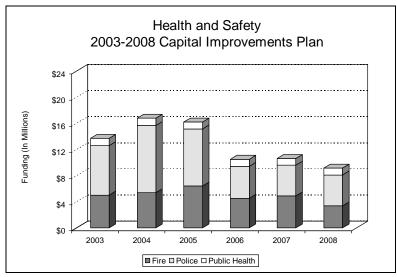
- 36 fire stations
- 7 district police stations
- 5 heath centers

Map 1



Map 1 shows the location of all fire stations, police district stations, and public health centers.

Figure 12



#### Fire

The Fire Department has 36 fire stations located throughout the city, a joint Police-Fire Training Academy, and a construction and maintenance facility. Seventeen firehouses were constructed prior to 1960. The remaining firehouses were either constructed or remodeled after 1960. Most of the fire stations constructed before 1960 no longer meet the city's firefighting and medical response needs. These facilities lack modern utilities and space for personnel. It is difficult to accommodate modern fire equipment on existing vehicle floors. Often vehicles are located where

they can fit in a station rather than being located where they may be needed.

The vehicle maintenance facility was constructed in the early 1900's. Modern fire equipment is configured differently and is much more sophisticated. The existing facility is inadequate to meet the department's maintenance needs.

Funding for Fire Department capital improvement projects total \$29.7 million over six years, or 38.6% of total health and safety funding. Across the six-year plan, funding for Fire Department projects ranges from \$3.4 million in 2008 to \$6.4 million in 2005.

The plan will fund construction of one fire station (\$1.8 million), repairs and alterations at another ten stations (\$8.7 million), repair shop replacement (\$2.6 million), window replacement and ventilation system improvements (\$1.2 million), major equipment replacement (\$12.9 million), and a computer-aided dispatch system (\$2.5 million). For a detailed listing of Fire Department's capital projects see Table 7 located at the end of this section.

#### **Police**

As mentioned above, the Police Department has seven district stations. The oldest of these is the Second District Station, built in 1953. The newest, the Third District Station, was completed in 2002. It also has a Police Administration Building (1971), a joint Police and Fire Training Academy (1965), an evidence storage facility (2001), and a general storage facility.

The six-year plan provides \$40.9 million, or 53.1% total health and safety funding for Police Department capital improvement projects. The renovation of the Police Administration Building and parking garage utilizes \$17.7 million. Replacement of the department's radio system with a flexible trunked system at a city cost of \$11 million will be completed in 2005. In addition, the city expects to receive at least \$3 million in federal and state grants. Almost \$8 million will be used to repair or renovate district stations, the training academy, and a storage facility. The remaining \$1.2 million will be used for replacement of computer equipment.

See Table 7 for a detailed listing of all capital projects for the Police Department.

#### Health

To effectively provide a range of public health services to city residents, the Health Department has five health centers located throughout the city. It also has administrative offices, laboratories, and provides services from the downtown Zeidler Municipal Building. Four of the health centers (Issac Coggs, South Side, Johnston, and Keenan) were built from 1915 through 1931. The newest, Northwest Health Center was built in 1968. The Health Department capital improvements plan is designed around major maintenance and repair of these buildings and their equipment.

Funding for this purpose totals approximately \$6.4 million or 8.3% of total health and safety funding in the 2003-2008 Capital Improvements Plan. The Health Department and Budget and Management Division determined that this increased funding level was necessary to effectively maintain the department's facilities.

The 2003-2008 Capital Improvements Plan provides \$2.2 million for the Health Department's Mechanical Systems Maintenance Program. This program focuses on building systems such as heating, ventilation, and air conditioning (HVAC), boilers, plumbing, and electrical systems. Aged, obsolete boilers will be replaced at Northwest Health Center in 2003, Coggs Health Center in 2003 and 2005, South Side Health Center in 2004, and Johnston Health Center in 2005 at a cost of between \$175.000 and \$200,000 each. Mechanical repairs for all health center elevators are planned in 2003 for \$40,000. In 2007, \$509,000 is planned to replace the 55, 1956 vintage self-contained heating and air conditioning units at the Johnston Health Center with a modern, efficient system. Other smaller projects, such as HVAC control replacement and funding for unanticipated projects make up the balance of the program.

The Exterior Building Maintenance Program is designed to maintain and improve external components and areas outside of the health centers. The 2003-2008 plan provides almost \$2 million for this program. Roofs will be replaced on Northwest's detached garage in 2003, Johnston, Northwest, and Keenan in 2004, and Coggs in 2006. Tuckpointing of exterior walls at all health centers is scheduled for 2003 and 2004. Exterior ADA accommodations are scheduled for 2004 through 2008. Coggs Health Center's aged, deteriorating windows will be replaced in 2006. Other smaller projects include

exterior signage replacement, new overhead canopies, and overhead door replacement.

The Health Department has allocated approximately \$2 million for the Interior Building Maintenance Program during the 2003-2008 plan. This program ensures that interior structures, surfaces, and fixtures such as flooring, lighting, and safety systems are functional and efficient. Fire alarm systems will be installed at three health centers. Interior ADA accommodations such as bathroom

renovations, elevator modifications, and doorway widening are planned for all five health centers. Replacement of worn out, deteriorated doors and doorframes, flooring, and carpeting are also planned.

The Client Tracking System will be replaced in 2003. Funding of \$300,000 is provided in the 2003 adopted budget. The system is further described below.

#### **PROGRAM CHANGES AND INITIATIVES**

**Fire Department Computer Aided Dispatch (CAD) System:** This system will replace the current CAD system, which has been operational since 1991. CAD is a unique system that employs communication hardware and software to aid and improve Fire Department dispatching operations. The CAD system will be installed in the Fire Department's portion of the new Data Communications Center/Third District Police Station. All 36 firehouses throughout the city will be linked to CAD.

Funding of approximately \$4 million was provided over a two year period (2000 and 2001) for the initial phase of this project. In 2003 an additional \$2.5 million is provided to complete funding for this upgrade. This phase of the project will enhance the information reporting capabilities of the CAD system to personnel in the field and improve response times to emergency situations.

Fire Equipment Replacement Program. The 2003-2008 capital plan includes \$12.9 million to continue the Equipment Replacement Program initiated in the 2001 budget. In 2002, acquisition of replacement fire equipment was shifted from the operating budget to the capital budget because fire equipment, including pumper trucks, ladder trucks, and paramedic ambulances, are long lived, high value assets. The 2003 budget includes \$2.3 million for the purchase of four paramedic ambulances, two pumper trucks, and two ladder trucks.

**Police Administration Building (PAB) Remodeling Project:** The six-year plan includes \$17.7 million in addition to \$2.1 provided in 2002, for renovation of the Police Administration Building and garage. Projects include office and entrance remodeling, reconstruction of the garage floor, up-

grading of the HVAC system, elevator replacement, and asbestos abatement.

**Digital Radio System:** The 2003-2008 plan includes \$11 million of city funding and \$3 million of grant funding for the new digital radio system required to meet new FCC transmission standards effective in 2005. The digital system utilizes modern technology, known as radio trunking, to provide the most efficient use of available radio channels or frequencies. Through radio trunking several users are able to communicate across a given frequency at the same time. This will allow Police and Fire personnel to more quickly communicate with one another.

Health Department Facilities: During 2002, the Health Department performed a comprehensive assessment of the capital needs for its five health center buildings. Accessibility considerations prompted increased funding to \$250,000 annually for interior and exterior projects related to the Americans with Disabilities Act (ADA) requirements. Exterior projects, such as roof replacement and tuckpointing total \$2 million during the sixyear plan. Mechanical systems replacement totals \$2.2 million over the 2003-2008 plan.

Health Department Client Tracking System: The current client tracking system is over ten years old. It lacks significant capability and was written in a now obsolete programming language. In 2002 a study was conducted to determine needed features and a general design for the system. The 2003 adopted budget provides \$300,000 for a replacement system. Desired capabilities include an interactive billing component and the ability to share client data with other local, state, and federal health agencies.

Table 7

2003-2008 Capital Improvements Plan for Health and Safety										
Project Title	2003 Budget	2004 Plan	2005 Plan	2006 Plan	2007 Plan	2008 Plan	Six-Year Plan			
FIRE DEPARTMENT										
Engine House Construction/Renovation										
Engine House #1-Alterations	\$0	\$1,180,000	\$0	\$0	\$0	\$0	\$1,180,00			
Engine House #2-Alterations	85,000	0	0	0	0	190,000	275,00			
Engine House #6-Alterations	0	0	0	0	0	1,200,000	1,200,00			
Engine House #7-Alterations	0	0	0	1,200,000	0	0	1,200,00			
Engine House #8-Land Acquisition and New Building	0	100,000	1,700,000	0	0	0	1,800,00			
Engine House #9-Floor Repairs	50,000	0	0	0	0	0	50,00			
Engine House #10-Alterations	0	0	0	0	1,200,000	0	1,200,00			
Engine House #12-Alterations	0	0	0	0	1,200,000	0	1,200,00			
Engine House #22-Alterations	0	0	0	1,200,000	0	0	1,200,00			
Engine House #34-Alterations	0	0	1,200,000	0	0	0	1,200,00			
Repair Shop Addition and Expansion-118 West Virginia	0	1,600,000	1,000,000	0	0	0	2,600,00			
Ventilation System and Window Replacement-Various										
Locations	200,000	200,000	200,000	200,000	200,000	200,000	1,200,00			
Subtotal	\$335,000	\$3,080,000	\$4,100,000	\$2,600,000	\$2,600,000	\$1,590,000	\$14,305,00			
Other Projects										
Major Capital Equipment	\$2,270,000	\$2,315,000	\$2,315,000	\$1,925,000	\$2,315,000	\$1,785,000	\$12,925,00			
Computer Aided Dispatch System	2,500,000	0	0	0	0	0	2,500,00			
Subtotal	\$4,770,000	\$2,315,000	\$2,315,000	\$1,925,000	\$2,315,000	\$1,785,000	\$15,425,00			
TOTAL FIRE DEPARTMENT PROJECTS										
TOTAL FIRE DEPARTMENT PROJECTS	\$5,105,000	\$5,395,000	\$6,415,000	\$4,525,000	\$4,915,000	\$3,375,000	\$29,730,00			
POLICE DEPARTMENT										
Police Administration Building Renovation	\$2,152,500	\$2,206,000	\$2,261,000	\$2,318,000	\$4,375,000	\$4,435,000	\$17,747,50			
District #4 Station Repairs	250,000	0	0	0	0	0	250,00			
ADA Compliance Program-Various Facilities	19,293	19,293	19,679	20,072	0	0	78,33			
District #7 Roof Replacement	150,000	0	0	0	0	0	150,00			
District Station Renovation	0	1,750,000	2,000,000	2,000,000	0	0	5,750,00			
Training Academy Firing Range	0	1,000,000	0	0	0	0	1,000,00			
Academy Parking Lot	0	150,000	0	0	0	0	150,00			
District Parking Improvements	0	150,000	150,000	150,000	0	0	450,00			
District Needs Assessment	0	15,000	15,000	0	0	0	30,0			
Storage Building 82nd and Keefe	0	0	0	125,000	0	0	125,00			
Subtotal	\$2,571,793	\$5,290,293	\$4,445,679	\$4,613,072	\$4,375,000	\$4,435,000	\$25,730,83			
Other Projects										
Trunked (Digital) Radio System	\$2,000,000	\$5,000,000	\$4,000,000	\$0	\$0	\$0	\$11,000,00			
******Grant & Aid******	3,000,000	0	0	0	0	0	3,000,00			
Computer Replacement	0	0	300,000	300,000	300,000	300,000	1,200,00			
Subtotal	\$5,000,000	\$5,000,000	\$4,300,000	\$300,000	\$300,000	\$300,000	\$15,200,00			
TOTAL POLICE DEPARTMENT PROJECTS	\$7,571,793	\$10,290,293	\$8,745,679	\$4,913,072	\$4,675,000	\$4,735,000	\$40,930,8			
HEALTH DEPARTMENT	0007.0	<b>#</b> 400.055	0040 555	0450.055	<b>#500.05</b>	<b>#</b> 000 005	00.40-			
Mechanical Systems Maintenance Program	\$267,000	\$400,000	\$642,500	\$150,000	\$529,000	\$200,000	\$2,188,50			
Exterior Building Maintenance Program	300,700	350,300	196,000	720,000	150,000	272,000	1,989,00			
Interior Building Maintenance Program	262,000	378,600	200,000	207,200	341,600	560,000	1,949,40			
Client Tracking System Replacement	300,000	0		0	0	0	300,00			
TOTAL HEALTH DEPARTMENT PROJECTS	\$1,129,700	\$1,128,900	\$1,038,500	\$1,077,200	\$1,020,600	\$1,032,000	\$6,426,90			
TOTAL HEALTH AND SAFETY	\$13,806,493	\$16,814,193	\$16,199,179	\$10,515,272	\$10,610,600	\$9,142,000	\$77,087,7			

# **ECONOMIC DEVELOPMENT**

Market forces that are beyond the direct control of public officials are the most important determinants of economic growth and activity in Milwaukee. However, the city does play a key role as a facilitator in creating the proper environment, urban design, and business climate within which the private sector can innovate, grow, and prosper. Economic development capital spending should be used to increase the overall attractiveness of the city for private sector investment. For example. since 1976, city capital spending in active tax incremental districts has increased property values by approximately \$357 million in real terms.

Economic development capital improvement projects consist of tax incremental districts, business improvement districts,

development district funds, and targeted business loans. The six-year plan includes approximately \$123.7 million, or 11.8%, of total funding for economic development projects. Figure 13 shows projected funding levels in the 2003-2008 Capital Improvements Plan.

#### **Tax Incremental Districts (TIDs)**

Tax Incremental District projects have proven to be a catalyst for economic development. Since the inception of this development vehicle in the mid-1970's, the city has established over 50 TIDs. Table 8 provides a summary of the 37 active TIDs. The vast majority of these projects have enjoyed significantly increased property values. The most substantial increases have been TID #5 Theater District (3,851%), TID #29 Park East II (5.777%). TID #10 Park East (1,699%), and TID #36 Granville Park (1,269%).

These districts have resulted in a resurgence of commercial, retail, and residential development ac-

Figure 13

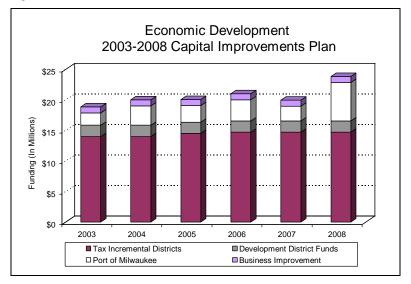


Table 8

Summary of Active Tax Incremental Districts											
TID#	Project Name	Year Created	Property Value When Created in 2001 Dollars	Property Value as of 2001	Percent Real Property Value Increase						
1	Menomonee Valley	1976	\$108.470.197	\$65,009,800	-40%						
5	Theater District	1985	1,442,032	84,748,700	5,777%						
10	Park East	1988	2,212,436	39,803,600	1,699%						
11	Historic Third Ward	1988	44,333,435	76,747,500	73%						
14	Historic King Place	1990	428,044	1,913,500	347%						
15	Steeltech	1991	795.380	3,739,000	370%						
17	Curry-Pierce	1992	841,282	2,547,500	203%						
18	New Covenant	1992	152,626	2,289,600	1.400%						
19	Campus Neighborhood	1992	30,996,867	47,104,200	52%						
20	Florida Yards	1993	3,726,421	5,536,800	49%						
21	North Avenue Jobs Bank	1993	2,106,313	4,666,100	122%						
22	Beer-line "B"	1993	9,561,125	26,727,800	180%						
23	City Hall Square	1994	5,829,800	18,952,000	225%						
24	Riverworks Industrial Center	1994	7,245,873	17,973,500	148%						
25	Calumet Woods	1994	443,439	9,780,600	2.106%						
26	Tannery	1995	7,850,571	24,147,000	208%						
27	Clarke Square Mega Mart	1995	1,950,291	12,694,100	551%						
28	City Homes	1995	907,169	7,117,200	685%						
29	Park East II	1995	1,039,151	41,052,700	3.851%						
30	Library Hill	1996	15,957,604	19,784,600	24%						
31	Milwaukee Street	1996	16,782,371	23,151,300	38%						
32	King Drive and Walnut	1996	2,892,131	6.260.600	116%						
33	United Health	1997	7,582,467	19,583,700	158%						
34	Third Ward Riverwalk	1997	6,418,425	22,718,300	254%						
35	27th and Wisconsin	1998	2,446,899	1,499,800	-39%						
36	Granville Park	1998	1,767,879	24,204,100	1,269%						
37	Grand Avenue	1998	65.868.081	84.218.600	1,209%						
38	S 5th St and W Grange	2000	218	200	-8%						
39	City Center Hilton	2000	26.059.418	37.892.200	45%						
40	West North Ave.	2000	-,,	5,344,300	45% 31%						
40	Harley Riverwalk	2000	4,075,982 12,280,886	12,485,600	2%						
41	•	2000	, ,	, ,	-8%						
42	Capital Court 21st and North Retail Center	2000	7,398,019	6,774,590	-8% 0%						
43	Locust/ Walnut Residential	2001	503,050	503,050	0%						
			33,441,810	33,441,810							
45 46	Wilson Commons	2001 2001	1,450,000	1,450,000	0%						
_	New Arcade Project		13,996,910	13,996,910	0%						
48	Park East Freeway Removal	2001	A440.054.000	4005 000 000							
	Totals  nformation is currently unavailable		\$449,254,602	\$805,860,860	79%						

tivity in the city. TID #11 the Historic Third Ward, TID #23 City Hall Square, and TID #22 Beerline "B" districts have spurred the development of downtown area residential units and associated business enterprises. In TID #42, the former Capitol Court Shopping Mall has transformed into a neighborhood town center with a main street, mixed retail area that is revitalizing the surrounding area. Several districts have been created to attract jobs to the city including TID #24 Riverworks Industrial Park Project, TID #21 North Avenue Jobs Bank Project, and TID #36 Granville Park Project.

The capital budget appropriates general obligation borrowing to finance public improvements and loans in tax incremental districts. The resulting developments are anticipated to increase property value. Debt service and interest are subsequently paid back with the incremental taxes generated through the district's increased property values. Of the total amount of funding for economic development 2003–2008 capital projects, \$86.6 million, or 70% is for TIDs.

TID debt is generally considered self-supporting since revenues will eventually pay back expenditures. Each year, TID borrowing authority is provided to finance both new and existing districts. In 2003, \$14 million is provided for TIDs to facilitate a number of developments, including infrastructure for redevelopment after removal of the Park East Freeway (\$7.5 million) and redevelopment of the Shops at Grand Avenue Arcade (\$6.5 million).

Plan funding for 2004 to 2008 ranges from \$14 million to \$14.7 million. Projects under consideration include further redevelopment efforts in the Menomonee Valley totaling approximately \$16 million, a mixed use Granville Station to replace the defunct Northridge Mall (\$5 million), additional funding for Park East Corridor development (\$6.5 million). The remaining funding is provided for emerging projects in plan years 2006 to 2008

# **Business Improvement Districts (BIDs)**

Business improvement capital funding consists of the Business Improvement District Loan Fund and Neighborhood Commercial District Street Improvement Fund. BIDs are created by neighborhood merchant groups under a provision in Wisconsin state law to maintain and improve the viability of commercial business areas. A district operating plan is developed and the BID members re-

Table 9

	Capital Investments in Active Business Improvement Districts										
BID#	BID Name	BID Loan Amount	Neighborhood Commercial Improvement								
2	Historic Third Ward	\$688,800	\$0								
3	Riverwalk	343,000	0								
4	Greater Mitchell Street	0	0								
5	Westown	0	0								
8	Historic King Drive	0	0								
9	735 North Water Street Riverwalk	277,000	0								
10	Avenues West	425,000	425,000								
11	Brady Street Business Area	582,600	500,000								
13	Oakland Avenue	192,560	16,000								
15	Downtown Riverwalks	3,666,278	0								
16	Uptown Triangle	500,000	500,000								
17	Northwest Area/76th and Brown Deer	175,000	0								
19	Villard Avenue	237,500	237,500								
20	North/Prospect/Farwell Avenues	885,950	500,000								
21	Downtown Management District	0	0								
22	Edgewood/Oakland	0	0								
25	Riverworks	650,000	650,000								
26	The Valley	0	0								
27	Burleigh Street	0	0								

ceive loans for improvements which are repaid through BID assessments.

The companion Neighborhood Commercial District Street Improvement Fund is intended to serve as a catalyst for private improvements. It provides up to a 50% match for select BID capital improvements outside the downtown commercial district. Projects are selected based on their potential to significantly improve the appearance of the street and on the likelihood the proposed public improvements will promote private investment.

At the end of 2001 the city had 19 active BIDs. As Table 9 indicates, several BIDs have chosen to make significant capital investments in their areas through this loan program including Historic Third Ward (\$688,000), Downtown RiverWalks (\$3.7 million), North/Prospect/Farwell Avenues (\$885,950) and Riverworks (\$650,000). This program has significantly contributed to the improvement of these areas.

Several BIDs outside the downtown area have utilized the Neighborhood Commercial District Street Improvement Program. They include the Brady Street Business Area, Uptown Triangle, Riverworks, and Avenues West. This matching program leverages private financing to upgrade these commercial areas, enhancing their attractiveness and viability.

Funding for BIDs and Neighborhood Commercial District Street Improvements totals \$6 million, or 4.9%, of economic development capital projects

evenly funded over the six-year plan. There are approximately one to two BID capital improvement projects and one to two Neighborhood Commercial District Street Improvement projects funded each year.

# **Development District Funds**

The Development Fund provides a catalyst for developer- and neighborhood-based project initiatives with great potential that need quicker response than possible with more structured options. This flexibility allows the city to address development opportunities as they arise. Projects that receive financial assistance from the Development Fund are chosen for their potential to stimulate development and/or remove blighting conditions. They are generally smaller projects that do not require the establishment of a tax incremental district. The intent of these public improvements is to encourage greater pedestrian traffic, upgrade the quality of design of existing facilities and uses, and make the public environment more accommodating to businesses.

The Advance Planning Fund finances planning studies and research into land use, marketing, development and redevelopment proposals, and other issues related to the physical and economic development of the city. These studies provide timely information to develop long term policy and development strategy. Examples include the Fond du Lac Transit Corridor Study, the King Drive Planning Study, a New Zoning Code Plan, and a number of TID feasibility studies.

The Development Fund will receive up to \$10.2 million during the 2003-2008 Capital Improvement Plan and \$900,000 in Advance Planning Funds. Together the \$11.1 million will account for 9% of economic development funding in the six-year plan. Funding for this purpose will be \$1.85 million annually.

#### **Port**

The Port of Milwaukee provides quality transportation and distribution services for Port customers. This facilitates local and regional economic activity and contributes to achievement of the city's strategic goal of strengthening the local economy and ensuring economic opportunities for all city residents.

The Port offers operational flexibility unique to the Western Great Lakes. Facilities include terminals designed for the efficient handling of containers, general cargo, roll-on/roll-off vehicles, dry and liquid bulk, and heavy machinery, plus intermodal connections to all Midwest cities. The Port's major facilities include four general cargo terminals, a refrigerated building, three liquid cargo terminals, and earthen or asphalt surfaces to store dry bulk or containers. Port maintained infrastructure includes 10 miles of dockwall, 10 miles each of sewer and water distribution systems, and over 15 miles of railroad track to connect to main line railroads. Major equipment includes ten heavy lift cranes of various capacities.

The major focus of the Port's capital improvement plan is to preserve existing assets. Funding also includes some improvements to take advantage of new business opportunities. Capital improvements are financed through the current tax levy, levy-supported borrowing, and grants from the state and federal government.

The 2003-2008 Capital Improvements Plan for the Port of Milwaukee totals \$20 million or 16.2% of economic development capital projects over the six-year plan. This includes \$11 million from state grants to rehabilitate and improve Port facilities. In the six-year capital plan, funding for the Port ranges from \$2 million in 2003 to \$6.3 million in 2008.

Pier, berth, and channel improvements total \$10 million, \$2 million in city funding and \$8 million in grants. Another \$1.5 million (\$300,000 city and \$1.2 million of grant funding) will be used for harbor maintenance and dredging. Sewer and railroad track upgrades account for \$1.1 million of the plan. The Port expects to purchase \$575,000 of cargo handling equipment during the plan and a new \$1.5 million heavy lift crane in 2008.

In 2004, the Port plans to use \$1.5 million to develop a rail to water facility in an effort to gain market share in the growing inter-modal transportation area.

To provide for future bulk operation expansion, the Port plans to acquire and rehabilitate an adjacent site on the Kinnickinnic River in 2008 with \$750,000 of city funds and a matching \$750,000 in grants. Associated rehabilitation of the site's dockwall is expected to cost \$1 million (\$200,000 city funded and \$800,000 in grants).

### **PROGRAM CHANGES AND INITIATIVES**

**Tax Incremental Districts:** The year 2002 has been a very active year for TIDs. The removal of the Park East Freeway on the north side of downtown is continuing. Redevelopment of the Park East's 23 acres is projected to increase the downtown tax base at least \$100 million over the next several years. Another high visibility project is the transformation of the former Capitol Court Shopping Mall into a neighborhood town center with a main street mixed retail area. This project is expected to revitalize the surrounding neighborhoods.

The recently completed new Sixth Street Viaduct will provide at grade access to the Menomonee River Valley. Combined with the reconstruction and extension of West Canal Street from Sixth Street to the Miller Park Baseball Stadium, DCD foresees great opportunities to redevelop the Valley with commercial and recreational uses.

Several other new projects are being developed for plan years 2003 to 2008. They include office building related improvements, further commercial and residential projects, and industrial projects. Areas being considered include the Solvay Coke site, 62<sup>nd</sup> Street and Mill Road, and technology and business parks.

**Business Improvement Districts:** In 2003, the new Atkinson/Capitol area BID will begin implementation of its planned improvements. Other BIDs with continuing phases include lighting for West North Avenue (BID#16) and West Burleigh Street (BID#27). The Valley (BID#26) will be active in conjunction with the Sixth Street Viaduct and Canal Street reconstruction and TID redevelopment.

Table 10

2003-200	8 Capital Imp	provements	Plan for Ec	onomic Dev	elopment		
Project Title	2003 Budget	2004 Plan	2005 Plan	2006 Plan	2007 Plan	2008 Plan	Six-Year Plan
Tax Increment Districts	\$14,000,000	\$14,000,000	\$14,500,000	\$14,700,000	\$14,700,000	\$14,700,000	\$86,600,000
Business Improvement Districts Neighborhood Commercial District Street	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
Improvement Fund	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
Development District Fund	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	10,200,000
Advance Planning Fund	150,000	150,000	150,000	150,000	150,000	150,000	900,000
Subtotal City Development	\$16,850,000	\$16,850,000	\$17,350,000	\$17,550,000	\$17,550,000	\$17,550,000	\$103,700,000
Port of Milwaukee Projects:							
Pier, Berth, and Channel Improvements	\$400,000	\$200,000	\$200,000	\$600,000	\$400,000	\$200,000	\$2,000,000
***********Grant & Aid********	1,600,000	800,000	800,000	2,400,000	1,600,000	800,000	8,000,000
Dockwall Rehabilitation	0	100,000	250,000	250,000	250,000	250,000	1,100,000
Harbor Maintenance Dredging	0	0	200,000	0	0	100,000	300,000
**************************************	0	0	800,000	0	0	400,000	1,200,000
Cargo Handling Equipment	0	50,000	375,000	0	150,000	0	575,000
New Crane Heavy Lift Equipment	0	0	0	0	0	1,500,000	1,500,000
Analyze and Upgrade Sewer System	0	250,000	0	0	0	250,000	500,00
Rail Track and Service Upgrades	0	100,000	0	100,000	0	100,000	300,000
***********Grant & Aid********	0	100,000	0	100,000	0	100,000	300,000
Rail/Water Transfer Facility	0	1,500,000	0	0	0	0	1,500,000
KK River Site Acquisition and Rehabilitation	0	0	0	0	0	750,000	750,000
***********Grant & Aid********	0	0	0	0	0	750,000	750,000
Rehab Dockwall KK River Site	0	0	0	0	0	200,000	200,000
***********Grant & Aid*********	0	0	0	0	0	800,000	800,000
Demolish Deteriorated Facilities and Grade	0	75,000	75,000	0	0	75,000	225,000
Subtotal Port of Milwaukee	\$2,000,000	\$3,175,000	\$2,700,000	\$3,450,000	\$2,400,000	\$6,275,000	\$20,000,000
Total Economic Development	\$18,850,000	\$20,025,000	\$20,050,000	\$21,000,000	\$19,950,000	\$23,825,000	\$123,700,000
Port of Milwaukee Funding:		-					·
City Funding	\$400,000	\$2,275,000	\$1,100,000	\$950,000	\$800,000	\$3,425,000	\$8,950,000
Grant and Aid	\$1,600,000	\$900,000	\$1,600,000	\$2,500,000	\$1,600,000	\$2,850,000	\$11,050,000

# **CULTURE AND RECREATION**

Culture and capital recreation improvement projects include public libraries, recreational facilities, and the Municipal Art Fund. The Pabst Theater, previously included in this section was sold to the Cudahy Foundation in 2002. In the 2003-2008 capital plan, approximately \$21.2 million, or 2% of total funding is provided for culture and recreation projects. Figure 14 shows the 2003-2008 Capital Improvements Plan for these projects.

The city invests in culture and recreation in order to strengthen the city's neighborhoods and to build on the city's role as the "cultural hub" of the metropolitan area. Public libraries and recreational facilities provide stability to

the city's neighborhoods by creating places for residents to learn and play close to home. By maintaining and upgrading its cultural and recreational facilities, Milwaukee is able to enhance the quality of life of all city residents.

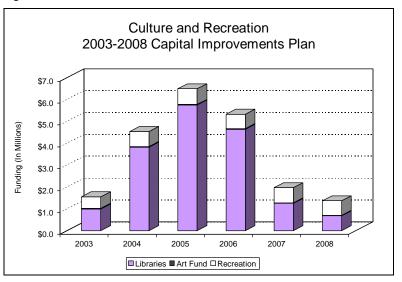
#### Libraries

The city's library system includes a central library and 12 neighborhood branch libraries. The Central Library was constructed in 1898 and had a major addition built in 1955. A new Washington Park Library will open in 2003. Other recent branch library construction includes the Bay View Library, (1993) and the Center Street Library (1989). The remaining library branches were constructed throughout the 1950's, 1960's, and 1970's.

Central Library is approximately 454,000 square feet. It houses 1.5 million volumes, the Regional Library for the Blind and Physically Handicapped, the Inter-Library Loan Program, and the Library's administrative offices.

Neighborhood libraries occupy, in total, 166,000 square feet and provide access to 826,000 volumes of reading and reference materials. They also offer an extensive audio and visual collection and provide a variety of educational programs.

Figure 14



Central Library and five neighborhood libraries have been extensively renovated or remodeled in the recent past. These projects have included mechanical systems upgrades, an on-line catalog system, and computers for patron use. As the libraries become more multi-functional, it is important that these facilities are capable of effectively meeting the needs of the public.

The 2003-2008 Capital Improvements Plan for public libraries totals \$17.1 million or 80.7% of total funding for culture and recreation projects. Of this amount, approximately \$10.2 million is for Central Library projects and \$6.9 million is for neighborhood library projects. Annual funding for library capital projects ranges from \$990,000 to \$5.74 million in the six-year plan.

The Central Library Improvements Program includes \$4.3 million for mechanical system related improvements and interior and exterior preservation and access changes. Mechanical systems improvements include installation of energy saving heating, ventilation, and conditioning (HVAC) systems; plumbing and ductwork; and electrical controls to replace outdated, under-capacity components. Also included are elevator upgrades to comply with the Americans with Disabilities Act (ADA), a fire alarm system, and a paging system.

The Central Library is a designated historic landmark. Preservation of the masonry, mosaic tiles, scagliola walls and columns, and other architectural features will maintain the beauty of the library's unique historic features.

The 2003-2008 plan provides \$5.9 million for Central Library remodeling projects including converting administrative areas to public space and reclaiming storage space for administrative functions. Much of the current storage areas are over-crowded. Administrative areas were last renovated in 1984. Workload and technology have changed tremendously. The current third floor layout is poorly utilized and in great need of renovation. Centennial Hall lighting, carpeting, and painting will be updated in 2004.

During the six-year plan, \$3.4 million will be used for neighborhood branch library exterior and interior improvements. These include completion of window replacement with energy efficient thermalpane windows at seven libraries. Other improvements include roof replacement, tuckpointing for masonry and brick walls, and sidewalk replacement.

remodeling includes Neighborhood library renovation of the East Library in 2004. In the following years, the Mill Road and Tippecanoe branches will be renovated. Over the six-year plan, \$3.5 million is provided for this purpose. These renovations will make the interior of the libraries attractive. compatible with changing technologies, and more useful to library patrons. ADA related accessibility improvements will also be included in this effort.

#### **Municipal Art Fund**

The 2003-2008 plan provides \$150,000, or approximately 1% of culture and recreation funding for the Municipal Art Fund. This \$25,000 annual amount provides for visual arts in newly constructed or remodeled city-owned buildings. The Milwaukee Arts Board determines the allocation of funds to be expended on works of art for construction projects.

#### Recreation

Recreational facilities include playgrounds and totlots located in neighborhoods throughout the city. These facilities provide a positive outlet for youthful energy and social interaction, strengthening the quality and enhancing the stability of Milwaukee's neighborhoods.

There are 45 non-supervised recreational areas and 10 passive green spaces totaling 69 acres. The city also has 37 playgrounds and playfields totaling 296 acres. There are 75 play areas on City of Milwaukee recreational facilities. The average design life of play areas is 15 to 20 years. The vast majority of children's play areas are in compliance with current standards including updated equipment on rubber or wood chip play surfaces, equipment early in its life cycle, equipment in good condition, and which meet safety and ADA accessibility standards.

In the 2003-2008 plan, nearly \$4 million, or 18.7% of total funding for culture and recreation projects is provided for renovation and maintenance of existing totlots. Funding for recreational facilities is \$530,000 in 2003 and averages \$686,000 from 2004 to 2008. This funding is sufficient to renovate approximately eight facilities each year. Grants for wading pool filtration system replacement in 2003 reduced the city funded component of this program.

Table 11

2003-2008 Capital Improvements Plan for Culture and Recreation											
2003 2004 2005 2006 2007 2008 Six-Ye Project Title Budget Plan Plan Plan Plan Plan											
Central Library Remodeling	\$50,000	\$350,000	\$3,500,000	\$2,000,000	\$0	\$0	\$5,900,000				
Central Library Improvements Program	380,000	1,200,000	690,000	735,000	770,000	500,000	4,275,000				
Neighborhood Library Remodeling	0	1,710,000	850,000	950,000	0	0	3,510,000				
Neighborhood Library Improvements Program	560,000	555,000	700,000	950,000	475,000	175,000	3,415,000				
Subtotal Library	\$990,000	\$3,815,000	\$5,740,000	\$4,635,000	\$1,245,000	\$675,000	\$17,100,000				
Municipal Art Fund	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$150,000				
Recreational Facilities	530,000	689,200	717,000	663,000	694,500	667,500	3,961,200				
TOTAL PROJECTS	\$1,545,000	\$4,529,200	\$6,482,000	\$5,323,000	\$1,964,500	\$1,367,500	\$21,211,200				

# **GENERAL GOVERNMENT**

General government capital improvement projects consist of maintenance and remodeling of city owned buildings and facilities and other special capital projects, as well as operation and maintenance of the city's underground conduit and communication systems. These projects programs provide buildings, equipment, and facilities in proper condition and configuration for city employees to meet the city's service delivery, public safety, and environment strategic goals.

In the six-year plan, approximately \$208.4 million is provided for these purposes, which accounts for 19.9% of total funding. Figure 15 shows projected funding levels for general government capital improvement projects for 2003-2008.

### **Maintenance and Remodeling**

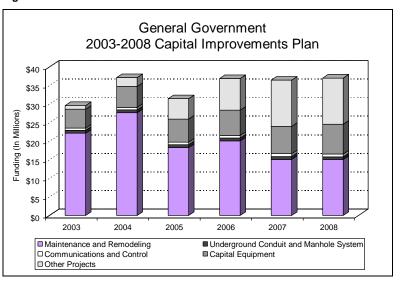
The Department of Public Works – Buildings and Fleet Division is responsible for maintenance and repair of approximately 160 city buildings. In addition, the division provides architectural and mechanical planning and design services for most city remodeling projects.

Criteria used to determine maintenance and remodeling needs include: (1) age and condition; (2) safety and security; (3) accessibility; (4) space needs; (5) organizational needs; (6) technological and communication needs; (7) current and future needs of city departments; and (8) operational savings or service delivery improvements generated by a project.

A computerized Facilities Condition Index (FCI) aids in evaluating building conditions and prioritizing maintenance and repair needs. The citywide FCI is used to develop an overall cyclical maintenance program and concentrate more resources on preventative maintenance programs.

In 2001, the Department of Public Works conducted a comprehensive facility condition assessment.

Figure 15



This effort updated a 1995 facility condition study performed by consultants. DPW staff performed extensive on site inspections to determine the physical condition of 109 city buildings and recreational facilities. A thorough visual inspection infrastructure. structural, electrical. mechanical, and roof components in each building performed. All maintenance, equipment replacement, and safety needs were identified and detailed. Cost estimates for needed maintenance and improvements were based on standard pricing for similar buildings. information will be useful in determining if a repaired. facility should be replaced. consolidated. Such information will be used to prioritize capital projects to most efficiently utilize maintenance and capital funds.

The six-year plan provides approximately \$114.8 million for remodeling and maintenance of city facilities. This includes remodeling of office space; upgrade of interior systems such as HVAC, plumbing and electrical systems; and exterior building repairs. These projects account for 55.1% of total general government capital improvement projects. Refer to the "Program Changes and Initiatives" section for discussion of the more significant projects.

# **Communications and Control System**

The city's communications and control resources consist of telephone systems, cellular telephones, data communications, systems, Fire and Police communications, security and alarm systems, street lighting and traffic signal control systems, two-way radio antenna connection systems, and video communications systems. The cable equipment used to connect these systems is a critical part of the city's infrastructure. communication and control program contributes to the attainment of several citywide strategic goals including: protecting citizens from crime and fire strengthening Milwaukee's hazards. neighborhoods, and ensuring residents and businesses obtain high value from and pay a fair cost for services provided by the city.

The city's telephone system, including Fire and Police, provides approximately 5,700 telephones for over 8,000 employees at over 150 site locations. These include telephone lines for approximately 235 fax machines. Voice mail services are provided to approximately 1,250 city employees and approximately 750 pages and 800 cellular telephones are in use by city employees.

The Community Safety Wide Area Network (CSWAN) is a system of copper and fiber optic cables, most of which reside in the city's 538.7 miles of underground conduit. The underground conduit grids the city and protects copper and fiber optic cables from inclement weather, accidents, and vandalism. A small portion of the network is direct buried or run overhead. Approximately 12 miles of cable is installed annually.

The city's wide area network includes about 80 miles of fiber optic cable providing data communications to 55 sites. Multiple data communication technologies are used. The CSWAN currently has an eight node Nbase Wide Area Network (WAN) providing Fast Ethernet data connectivity for the Police Department. The city also has a six switch Asynchronous Transfer Mode (ATM) WAN which is transporting Ethernet and Fast Ethernet to Buildings and Fleet, DCD, Forestry, Health, Infrastructure Services, Police, Sanitation, Tow Lot, Fire Department, Library, Municipal Court, Port, and Water Works locations.

Several other important services are provided under the umbrella of communications and control resources. Telemetering provides information and control for water distribution, volume, and pressure throughout the city and surrounding communities. Telemetering also provides sewer monitoring and pump control to help prevent sewer backup and backwater problems. Traffic signal control helps the smooth and orderly movement of traffic throughout the city.

In the six-year plan, approximately \$4 million, or 1.9% of total funding for general government capital improvement projects is provided for the city's communication system which includes telecommunications, voice, data and video service circuits, interconnecting phones, computers, alarms, and radios. This will enhance the city's cable plant by extending it to locations in need of data interconnection services. The plan focuses on the Fire Department, Department of City Development, Housing Authority, and public libraries.

# **Major Capital Equipment**

Beginning in 2002, durable equipment items with a per unit cost of \$50,000 or more are included in the capital budget. The objective of this program is to make timely replacements of equipment that is beyond economical repair to maintain service delivery levels to residents. Over 1,500 pieces of "major" equipment used by several Department of Public Works divisions are included in this program ranging from dump trucks and garbage packers to street sweepers. DPW's equipment funding is \$39.1 million or 18.8% of general government funding during the plan. Fire equipment is classified in the Fire Department capital plan.

# **Other Projects**

The six-year plan provides approximately \$45.9 million, or 22% of total general government capital funding for other projects. Unspecified capital projects at the time the plan was completed account for \$39.5 million of total funding for other projects. This funding is necessary to ensure an adequate level of financial support for future general government capital projects.

The Technology Initiative Program is allocated \$6 million over the six year plan. It is intended to provide city departments with an opportunity to invest in new technology. To qualify for funding, departments must submit a business plan that both meets citywide strategic goals and provides the ability to repay the investment in three years or less.

# **Underground Conduit and Electrical Manhole Programs**

The Underground Conduit and Manholes Program provides a secure, weatherproof routing network for city communications cables, signal controlled traffic intersection cables, and street lighting cable circuits. The city has a network of 540 miles of underground conduit and over 7,300 manholes providing communication links to over 200

building and yard sites, 76,000 street lamps, and 700 traffic signaled intersections. Approximately 1.5 to 2 miles of conduit and 14 manholes are installed or replaced each year. Whenever possible, expansion, or reconstruction of the underground conduit system is planned to coincide with street reconstruction, urban development, and private construction projects.

Funding totaling \$4.6 million, or 2.2% of general government capital improvement projects is provided for maintenance and expansion of the city's underground conduit system as well as for repair and replacement of various underground electrical manholes throughout the city. Funding for these purposes is budgeted for \$760,000 in 2003 and remains at this level throughout the six-year plan.

#### PROGRAM CHANGES AND INITIATIVES

**City Hall Restoration Program:** Milwaukee's City Hall is an architecturally significant landmark building listed on the National Register of Historic Places. The 2003-2008 plan includes funding of \$31.7 for city hall restoration.

Two studies of the city hall structure were conducted in 2000 and 2001. The initial consultant study consisted of a detailed, "hands-on" visual condition survey of the exterior of the building. A close inspection occurred including rappelling down the sides of the building.

The information gathered by the initial study formed the basis for the second, in-depth investigation. The objective of this phase was to determine the severity and causes of the distressed conditions. Extensive work including disassembly of particular parts of the building was conducted and the scope of the repairs required was determined. The second phase study was critiqued by a peer review committee regarding the repair approach. A cost estimate and construction plan was devised and the project cost was estimated at approximately \$44 million over five to six years.

The restoration costs estimates underwent further analysis by the Administration and several funding changes have been made. The hollow sidewalk phase of the City Hall Restoration has been moved into a separate capital account titled "City Hall Hollow Walk Replacement" and is funded at \$5 million in 2006. Due to the expected construction timeline, the walks could not be replaced until restoration of the building is nearly complete or completed. Creating a separate capital account provides for the opportunity of lowering costs by bidding this portion of the project out separately.

Replacing decorative details currently not on the building, estimated at \$1.2 million, has been removed from the project while the city looks into alternative funding sources. The city expects to apply for historic preservation grants and explore other alternatives including seeking private funding mechanisms. The plan also reduces funding for the slate roof repairs on the main section of the building by \$1.5 million, utilizing the original cost estimates provided by phase two report of exploration and remedial stabilization.

This multi-year project will restore the exterior façade and roofs of city hall to ensure water tight, energy efficient, and safe condition. Extensive repairs are needed to address age related deterioration of key exterior elements such as the brick, terra cotta, sandstone, windows, embedded structural steel, and copper roofing.

In addition, a Historic Structures Report will be written by consultants who are experts in historic preservation to obtain Historic Landmark Status from the National Park Service. This may allow the city to seek federal funding for a portion of this project.

City Hall Hollow Walk Replacement: Funding in 2006 includes \$5 million for the replacement of the hollow sidewalks around city hall. Due to the expected construction timeline of the City Hall Restoration Program, the walks could not be replaced until restoration of the building is nearly complete or completed. This project addresses the structural deterioration of the hollow, vaulted sidewalks around city hall and includes funding for the necessary structural analysis, removal of the hollow walk, foundation repairs, membrane water proofing, and sidewalk and hollow walk replacement.

Municipal Garage and Outlying Facilities
Development Program: Several DPW's facilities
including the Municipal Garage, are in need of
repair, replacement, or consolidation. These

improvements will improve workflow layouts, replace outdated mechanics' equipment to improve vehicle repair efficiency and safety, and replace outdated building systems to meet current building codes for energy efficient lighting, HVAC and digital controls, and fire and life-safety systems. Future improvements of the Central Municipal Garage shall incorporate the findings of the "Consolidated Municipal Garage/Fire Repair Facility Study Project", funding in 2002 to examine the potential combination of Fleet Services and Fire Repair Shop operations. Over \$18 million is provided in the 2003-2008 plan for this purpose.

**Major Capital Equipment:** In the 2003-2008 plan, \$39.1 million is provided for major capital equipment. Major capital equipment is durable equipment with an original unit cost of \$50,000 or more. It includes equipment ranging from dump trucks and garbage packers to specialized equipment such as a directional boring machine for conduit installation. Total funding of \$5 million is provided in 2003 for this equipment and annual funding increases gradually to approximately \$8 million in 2008.

Table 12

Project Title	2003 Budget	2004 Plan	2005 Plan	2006 Plan	2007 Plan	2008 Plan	Six-Year Plan
REMODELING/CONSTRUCTION PROJECTS							
Remodel 809 Bldg 4th Floor - Info Technology Mgmt Division Dept of Neighborhood Services - ZMB 10th Fl and Anderson Bldg ADA Compliance Program Downtown Complex Remodeling	\$811,500 260,000 655,200 1,131,400	\$0 0 752,000 2,051,000	\$0 0 768,500 2,080,400	\$0 0 780,400 1,635,500	\$0 0 794,300 1,956,000	\$0 0 816,400 1,956,000	\$811,50 260,00 4,566,80 10,810,30
Municipal Garage/Outlying Facilities Development Program  Space Planning, Alterations and Engineering	871,220 207,000	2,010,780 207,000	3,211,000 214,000	3,920,000 214,000	4,228,000 229,000	3,920,000 229,000	18,161,00 1,300,00
TOTAL REMODELING/CONSTRUCTION PROJECTS	\$3,936,320	\$5,020,780	\$6,273,900	\$6,549,900	\$7,207,300	\$6,921,400	\$35,909,60
MAINTENANCE PROJECTS	ψο,οσο,ο2ο	ψ0,020,100	ψ0,2.0,000	ψο,ο το,οσο	ψ.,20.,000	ψο,οΣ ι, ισσ	<b>\$</b> 00,000,0
Facility Systems Program Facility Exterior Program City Hall Restoration Program City Hall Hollow Walk Program	\$4,420,500 1,368,000 12,400,000 0	\$5,024,800 1,422,900 16,200,000 0	\$5,155,200 1,457,500 2,735,000 0	\$5,847,800 1,483,200 400,000 5,000,000	\$6,402,300 1,496,800 0	\$6,593,400 1,509,000 0	\$33,444,0 8,737,4 31,735,0 5,000,0
TOTAL MAINTENANCE PROJECTS	\$18,188,500	\$22,647,700	\$9,347,700	\$12,731,000	\$7,899,100	\$8,102,400	\$78,916,4
COMMUNICATIONS AND MANHOLES							
Communication and Control System Underground Conduit and Manhole Program Underground Electrical Manhole Reconstruction	\$626,000 539,000 221,000	\$645,000 539,000 221,000	\$664,000 539,000 221,000	\$684,000 539,000 221,000	\$704,000 539,000 221,000	\$725,000 539,000 221,000	\$4,048,0 3,234,0 1,326,0
TOTAL COMMUNICATIONS AND MANHOLE PROJECTS	\$1,386,000	\$1,405,000	\$1,424,000	\$1,444,000	\$1,464,000	\$1,485,000	\$8,608,0
OTHER PROJECTS							
Major Capital Equipment Technology Initiative FMIS eProcurement Unspecified Capital Projects	\$4,968,000 1,000,000 0 0	\$5,662,400 1,000,000 390,000 1,000,000	\$6,246,800 1,000,000 0 7,165,000	\$6,831,200 1,000,000 0 8,300,000	\$7,415,600 1,000,000 0 11,500,000	\$8,000,000 1,000,000 0 11,500,000	\$39,124,0 6,000,0 390,0 39,465,0
TOTAL OTHER PROJECTS	\$5,968,000	\$8,052,400	\$14,411,800	\$16,131,200	\$19,915,600	\$20,500,000	\$84,979,0
GRAND TOTAL OF PROJECTS	\$29,478,820	\$37,125,880	\$31,457,400	\$36,856,100	\$36,486,000	\$37,008,800	\$208,413,0

# TABLE 13 2003-2008 Capital Improvements Plan

	2003	2004	2005	2006	2007	2008	TOTAL
	ADOPTED BUDGET	BUDGET PLAN	BUDGET PLAN	BUDGET PLAN	BUDGET PLAN	BUDGET PLAN	SIX-YEAR PLAN
SPECIAL CAPITAL PROJECTS							
Municipal Art Fund	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$150,000
Grant & Aid Fund	10,300,000	10,300,000	10,300,000	10,300,000	10,300,000	10,300,000	61,800,000
Technology Initiative	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	6,000,000
Unspecified	0	1,000,000	7,165,000	8,300,000	11,500,000	11,500,000	39,465,000
TOTAL SPECIAL CAPITAL PROJECTS	\$11,325,000	\$12,325,000	\$18,490,000	\$19,625,000	\$22,825,000	\$22,825,000	\$107,415,000
ADMINISTRATION							
Remodel ITMD 809 Building 4th Floor	\$811,500	\$0	\$0	\$0	\$0	\$0	\$811,500
FMIS eProcurement	0	390,000	0	0	0	0	390,000
TOTAL ADMINISTRATION	\$811,500	\$390,000	\$0	\$0	\$0	\$0	\$1,201,500
DEPARTMENT OF NEIGHBORHOOD SERVICES							
Remodeling Project Municipal Building and Anderson Building	\$260,000	\$0	\$0	\$0	\$0	\$0	\$260,000
TOTAL DEPARTMENT OF NEIGHBORHOOD SERVICES	\$260,000	\$0	\$0	\$0	\$0	\$0	\$260,000
DEPARTMENT OF CITY DEVELOPMENT							
Neighborhood Commercial District Street Improvement Fund	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$3,000,000
Business Improvement District	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
Tax Incremental Districts	14,000,000	14,000,000	14,500,000	14,700,000	14,700,000	14,700,000	86,600,000
Development Fund	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	10,200,000
Advance Planning Fund	150,000	150,000	150,000	150,000	150,000	150,000	900,000
TOTAL DEPARTMENT OF CITY DEVELOPMENT	\$16,850,000	\$16,850,000	\$17,350,000	\$17,550,000	\$17,550,000	\$17,550,000	\$103,700,000
FIRE DEPARTMENT							
Engine House #1 - Alterations (784 North Broadway)	\$0	\$1,180,000	\$0	\$0	\$0	\$0	\$1,180,000
Engine House #2 - Alterations (755 North James Lovell Street)	85,000	0	0	0	0	190,000	275,000
Engine House #6 - Alterations (1693 North Franklin Place)	0	0	0	0	0	1,200,000	1,200,000
Engine House #7 - Alterations (3174 South Chase Avenue)	0	0	0	1,200,000	0	0	1,200,000
Engine House #8 - Land Acquisition and New Building	0	100,000	1,700,000	0	0	0	1,800,000
Engine House #9 - Floor Repairs (4141 West Mill Road)	50,000	0	0	0	0	0	50,000
Engine House #10 - Alterations (5600 West Oklahoma Avenue)	0	0	0	0	1,200,000	0	1,200,000
Engine House #12 - Alterations (1400 South 9th Street)	0	0	0	0	1,200,000	0	1,200,000
Engine House #22 - Alterations (8814 West Lisbon Avenue)	0	0	0	1,200,000	0	0	1,200,000
Engine House #34 - Alterations (6205 West Burleigh Street)	0	0	1,200,000	0	0	0	1,200,000
Repair Shop Addition and Expansion - 118 West Virginia	0	1,600,000	1,000,000	0	0	0	2,600,000
Ventilation System and Window Replacement - Various Locations	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000
Major Capital Equipment	2,270,000	2,315,000	2,315,000	1,925,000	2,315,000	1,785,000	12,925,000
Computer Aided Dispatch System	2,500,000	0	0	0	0	0	2,500,000
TOTAL FIRE DEPARTMENT	\$5,105,000	\$5,395,000	\$6,415,000	\$4,525,000	\$4,915,000	\$3,375,000	\$29,730,000

	2003 ADOPTED BUDGET	2004 BUDGET PLAN	2005 BUDGET PLAN	2006 BUDGET PLAN	2007 BUDGET PLAN	2008 BUDGET PLAN	TOTAL SIX-YEAR PLAN
HEALTH DEPARTMENT							
Client Tracking System Replacement	\$300,000	\$0	\$0	\$0	\$0	\$0	\$300,000
Mechanical Systems Maintenance Program - Various Health Department Buildings	267,000	400,000	642,500	150,000	529,000	200,000	2,188,500
Exterior Building Maintenance Program - Various Health Department Buildings	300,700	350,300	196,000	720,000	150,000	272,000	1,989,000
Interior Building Maintenance Program - Various Health Department Buildings	262,000	378,600	200,000	207,200	341,600	560,000	1,949,400
TOTAL HEALTH DEPARTMENT	\$1,129,700	\$1,128,900	\$1,038,500	\$1,077,200	\$1,020,600	\$1,032,000	\$6,426,900
LIBRARY							
CENTRAL LIBRARY							
Central Library Improvements Program	\$380,000	\$1,200,000	\$690,000	\$735,000	\$770,000	\$500,000	\$4,275,000
Central Library Remodeling Fund	50,000	350,000	3,500,000	2,000,000	0	0	5,900,000
NEIGHBORHOOD LIBRARIES		·					
Neighborhood Library Improvements Program	\$560,000	\$555,000	\$700,000	\$950,000	\$475,000	\$175,000	\$3,415,000
Neighborhood Library Remodeling Fund	0	1,710,000	850,000	950,000	0	0	3,510,000
TOTAL LIBRARY	\$990,000	\$3,815,000	\$5,740,000	\$4,635,000	\$1,245,000	\$675,000	\$17,100,000
POLICE DEPARTMENT							
Police Administration Building Renovation	\$2,152,500	\$2,206,000	\$2,261,000	\$2,318,000	\$4,375,000	\$4,435,000	\$17,747,500
District #4 Station Repairs	250,000	0	0	0	0	0	250,000
Trunked (Digital) Radio System	2,000,000	5,000,000	4,000,000	0	0	0	11,000,000
Trunked (Digital) Radio System ***Grant & Aid***	3,000,000	0	0	0	0	0	3,000,000
ADA Compliance Program - Various Facilities	19,293	19,293	19,679	20,072	0	0	78,337
District #7 Roof Replacement	150,000	0	0	0	0	0	150,000
District Station Renovation	0	1,750,000	2,000,000	2,000,000	0	0	5,750,000
Training Academy Firing Range	0	1,000,000	0	0	0	0	1,000,000
Academy Parking Lot	0	150,000	0	0	0	0	150,000
District Parking Improvements	0	150,000	150,000	150,000	0	0	450,000
District Needs Assessment	0	15,000	15,000	0	0	0	30,000
Computer Replacement	0	0	300,000	300,000	300,000	300,000	1,200,000
Storage Building 82nd and Keefe	0	0	0	125,000	0	0	125,000
Grant & Aid	\$3,000,000	\$0	\$0	\$0	\$0	\$0	\$3,000,000
Total City Funding	\$4,571,793	\$10,290,293	\$8,745,679	\$4,913,072	\$4,675,000	\$4,735,000	\$37,930,837
TOTAL POLICE DEPARTMENT	\$7,571,793	\$10,290,293	\$8,745,679	\$4,913,072	\$4,675,000	\$4,735,000	\$40,930,837
PORT OF MILWAUKEE							
Dockwall Rehabilitation	\$0	\$100,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,100,000
Harbor Maintenance Dredging	0	0	200,000	0	0	100,000	300,000
**************************************	0	0	800,000	0	0	400,000	1,200,000
Cargo Handling Equipment	0	50,000	375,000	0	150,000	0	575,000
Analyze and Upgrade Sewer System	0	250,000	0	0	0	250,000	500,000
Pier, Berth, and Channel Improvements	400,000	200,000	200,000	600,000	400,000	200,000	2,000,000

	2003 ADOPTED BUDGET	2004 BUDGET PLAN	2005 BUDGET PLAN	2006 BUDGET PLAN	2007 BUDGET PLAN	2008 BUDGET PLAN	TOTAL SIX-YEAR PLAN
**************************************	1,600,000	800,000	800,000	2,400,000	1,600,000	800,000	8,000,000
New Crane - Heavy Lift Equipment	0	0	0	0	0	1,500,000	1,500,000
KK River Site Acquisition and Rehabilitation	0	0	0	0	0	750,000	750,000
***********Grant & Aid********	0	0	0	0	0	750,000	750,000
Rail Track and Service Upgrades	0	100,000	0	100,000	0	100,000	300,000
**********Grant & Aid********	0	100,000	0	100,000	0	100,000	300,000
Rail/Water Transfer Facility	0	1,500,000	0	0	0	0	1,500,000
Rehab Dockwall KK River Site	0	0	0	0	0	200,000	200,000
**************************************	0	0	0	0	0	800,000	800,000
Demolish Deteriorated Facilities and Grade Sites	0	75,000	75,000	0	0	75,000	225,000
Grant & Aid	\$1,600,000	\$900,000	\$1,600,000	\$2,500,000	\$1,600,000	\$2,850,000	\$11,050,000
Total City Funding	\$400,000	\$2,275,000	\$1,100,000	\$950,000	\$800,000	\$3,425,000	\$8,950,000
TOTAL PORT OF MILWAUKEE	\$2,000,000	\$3,175,000	\$2,700,000	\$3,450,000	\$2,400,000	\$6,275,000	\$20,000,000
DPW-ADMINISTRATIVE SERVICES DIVISION							
DPW Environmental Projects Fund	\$0	\$1,150,000	\$0	\$0	\$0	\$0	\$1,150,000
Public Safety Communications	626,000	645,000	664,000	684,000	704,000	725,000	4,048,000
TOTAL DPW-ADMINISTRATIVE SERVICES DIVISION	\$626,000	\$1,795,000	\$664,000	\$684,000	\$704,000	\$725,000	\$5,198,000
DPW-OPERATIONS DIVISION							
Sanitation Projects							
Sanitation Headquarters Modification - Various Sites	\$1,354,000	\$800,000	\$800,000	\$1,200,000	\$1,000,000	\$1,000,000	\$6,154,000
Subtotal Sanitation Projects	\$1,354,000	\$800,000	\$800,000	\$1,200,000	\$1,000,000	\$1,000,000	\$6,154,000
Forestry Projects							
Concealed Irrigation and General Landscaping - City Boulevards	\$381,000	\$381,000	\$381,000	\$381,000	\$381,000	\$381,000	\$2,286,000
Planting Trees, Shrubs, and Evergreens (Paving) Various	448,485	460,000	460,000	480,000	520,000	520,000	2,888,485
Greenhouses (Intergovernmental Agreement with Milwaukee County)	150,000	0	0	0	0	0	150,000
Subtotal Forestry Projects	\$979,485	\$841,000	\$841,000	\$861,000	\$901,000	\$901,000	\$5,324,485
Buildings and Fleet Projects							
City Hall Restoration Program	\$12,400,000	\$16,200,000	\$2,735,000	\$400,000	\$0	\$0	\$31,735,000
City Hall Hollow Walk Replacement	0	0	0	5,000,000	0	0	5,000,000
Environmental Program	641,400	935,000	996,900	777,200	858,100	892,400	5,101,000
ADA Compliance Program	655,200	752,000	768,500	780,400	794,300	816,400	4,566,800
Facilities Exterior Program	1,368,000	1,422,900	1,457,500	1,483,200	1,496,800	1,509,000	8,737,400
City Hall Complex Remodeling	1,131,400	2,051,000	2,080,400	1,635,500	1,956,000	1,956,000	10,810,300
Municipal Garages/Outlying Facilities Development Program	871,220	2,010,780	3,211,000	3,920,000	4,228,000	3,920,000	18,161,000
Facilities Systems Program	4,420,500	5,024,800	5,155,200	5,847,800	6,402,300	6,593,400	33,444,000
Recreational Facilities Program	530,000	689,200	717,000	663,000	694,500	667,500	3,961,200
Major Capital Equipment (\$50,000 or more)	4,968,000	5,662,400	6,246,800	6,831,200	7,415,600	8,000,000	39,124,000
Space Planning Alterations and Engineering	207,000	207,000	214,000	214,000	229,000	229,000	1,300,000
Subtotal Buildings and Fleet Projects	\$27,192,720	\$34,955,080	\$23,582,300	\$27,552,300	\$24,074,600	\$24,583,700	\$161,940,700
TOTAL DPW-OPERATIONS DIVISION	\$29,526,205	\$36,596,080	\$25,223,300	\$29,613,300	\$25,975,600	\$26,484,700	\$173,419,185

	2003	2004	2005	2006	2007	2008	TOTAL
	ADOPTED	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET	SIX-YEAR
	BUDGET	PLAN	PLAN	PLAN	PLAN	PLAN	PLAN
DPW-INFRASTRUCTURE SERVICES DIVISION							
Expansion of Capacity Sewers - Various Locations	\$2,959,000	\$2,909,000	\$2,909,000	\$2,909,000	\$4,073,000	\$4,073,000	\$19,832,000
Development Out-of-Program Agreement Sewer Program at Various Locations	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
Underground Conduit and Manholes Program Citywide	539,000	539,000	539,000	539,000	539,000	539,000	3,234,000
Major Bridge Program	1,826,000	4,422,000	2,900,000	2,436,000	2,057,000	2,092,000	15,733,000
*************Grant & Aid********	7,911,000	5,978,000	1,595,000	2,844,000	1,893,000	6,658,000	26,879,000
Street Improvements - City Portion of State and/or Federal Aided Projects	11,085,185	4,654,445	4,171,100	4,147,645	3,643,250	4,376,645	32,078,270
**************************************	28,183,950	11,242,645	13,029,900	11,508,245	13,541,750	13,729,245	91,235,735
New Street Construction	681,000	451,000	451,000	451,000	451,000	451,000	2,936,000
Street Reconstruction and Resurface	6,100,000	5,092,000	7,092,000	5,092,000	7,092,000	5,092,000	35,560,000
Alley Reconstruction and Resurface	2,489,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	14,989,000
Sidewalk Replacement Program (Contract and Scattered Sites)	2,300,000	2,300,000	2,300,000	2,300,000	2,300,000	2,300,000	13,800,000
New Streets - Developer	400,000	400,000	400,000	400,000	400,000	400,000	2,400,000
Street Lighting Program - Citywide	5,604,000	6,349,639	6,584,581	6,760,246	6,855,348	6,972,136	39,125,950
Emergency Response Management Opticom Program	147,000	0	0	0	0	0	147,000
Traffic Control Facilities - Citywide	682,000	697,000	707,000	717,000	717,000	717,000	4,237,000
Underground Electrical Manholes (Communication, Traffic Control, Street Lighting) Reconstruction Program	221,000	221,000	221,000	221,000	221,000	221,000	1,326,000
Grant & Aid	\$36,094,950	\$17,220,645	\$14,624,900	\$14,352,245	\$15,434,750	\$20,387,245	\$118,114,735
Total City Funding	\$35,533,185	\$31,035,084	\$31,274,681	\$28,972,891	\$31,348,598	\$30,233,781	\$188,398,220
TOTAL DPW-INFRASTRUCTURE SERVICES	\$71,628,135	\$48,255,729	\$45,899,581	\$43,325,136	\$46,783,348	\$50,621,026	\$306,512,955
BUDGETED GRANT & AID	\$40,694,950	\$18,120,645	\$16,224,900	\$16,852,245	\$17,034,750	\$23,237,245	\$132,164,735
SUBTOTAL CITY FUNDED CAPITAL PROJECTS	\$107,128,383	\$121,895,357	\$116,041,160	\$112,545,463	\$111,058,798	\$111,060,481	\$679,729,642
PARKING FUND							
MacArthur Square Stair Repair and Basement Painting	\$0	\$175,000	\$0	\$0	\$0	\$0	\$175,000
2nd and Plankinton - Traffic Membrane	217,000	217,000	0	0	0	0	434,000
Misc Mechanical Repairs and Upgrades	125,000	125,000	125,000	100,000	100,000	100,000	675,000
Structural Repairs to Various Structures	125,000	125,000	125,000	100,000	100,000	100,000	675,000
Replace Revenue Control Equipment - Four Structures	969,000	0	0	0	0	0	969,000
MacArthur Square Remembrane Project	0	460,000	375,000	405,000	0	0	1,240,000
Milwaukee/Michigan Remembrance Project	0	0	335,000	0	0	0	335,000
1000 North Water Street - Membrane Replacement	0	193,000	0	0	0	0	193,000
1000 North Water Street - Drain Pipe Repacking	0	100,000	0	0	0	0	100,000
1000 North Water Street - Joint Replacement	0	0	280,000	0	0	0	280,000
Milwaukee/Michigan Repainting	0	0	0	950,000	950,000	0	1,900,000
4th and Highland - Recaulking	0	0	0	0	475,000	0	475,000
Consolidated Facility for Parking Enforcement	225,000	0	0	0	0	0	225,000
1000 North Water Street - Deck Sealing	0	0	0	0	0	550,000	550,000
2nd and Plankinton - Concrete Slab Repairs	0	0	0	0	0	100,000	100,000
TOTAL PARKING FUND	\$1,661,000	\$1,395,000	\$1,240,000	\$1,555,000	\$1,625,000	\$850,000	\$8,326,000

APPENDIX

	2003 ADOPTED BUDGET	2004 BUDGET PLAN	2005 BUDGET PLAN	2006 BUDGET PLAN	2007 BUDGET PLAN	2008 BUDGET PLAN	TOTAL SIX-YEAR PLAN
DPW-WATER WORKS							
Distribution Water Main Program	\$10,000,000	\$10,200,000	\$10,506,000	\$10,821,180	\$11,145,815	\$11,480,190	\$64,153,185
Development Out-of-Program Agreement at Various Locations throughout the City	600,000	600,000	600,000	600,000	600,000	600,000	3,600,000
Feeder Main Program	1,000,000	1,020,000	1,040,400	1,061,208	1,082,432	1,104,081	6,308,121
Linwood Plant Building Improvements	0	500,000	650,000	200,000	0	0	1,350,000
Linwood Plant Treatment Improvements	1,150,000	300,000	300,000	350,000	1,350,000	1,975,000	5,425,000
Howard Plant Building Improvements	0	500,000	200,000	200,000	0	0	900,000
Howard Plant Treatment Improvements	0	0	0	500,000	150,000	300,000	950,000
Pump Facilities Improvements	1,400,000	1,000,000	2,200,000	1,450,000	1,750,000	850,000	8,650,000
Storage Facilities Improvements	750,000	500,000	0	0	0	0	1,250,000
Meter Shop Improvements	0	450,000	0	300,000	0	0	750,000
TOTAL DPW-WATER WORKS	\$14,900,000	\$15,070,000	\$15,496,400	\$15,482,388	\$16,078,247	\$16,309,271	\$93,336,306
DPW-SEWER MAINTENANCE FUND							
Sewer Debris Dewatering Sites	\$200,000	\$0	\$0	\$0	\$0	\$0	\$200,000
Sewer Maintenance Relay Program	19,500,000	21,500,000	21,500,000	23,500,000	23,500,000	25,500,000	135,000,000
TOTAL DPW SEWER MAINTENANCE FUND	\$19,700,000	\$21,500,000	\$21,500,000	\$23,500,000	\$23,500,000	\$25,500,000	\$135,200,000
TOTAL GRANT & AID	\$40,694,950	\$18,120,645	\$16,224,900	\$16,852,245	\$17,034,750	\$23,237,245	\$132,164,735
TOTAL NON-GRANT	\$143,389,383	\$159,860,357	\$154,277,560	\$153,082,851	\$152,262,045	\$153,719,752	\$916,591,948
TOTAL CAPITAL IMPROVEMENTS PLAN	\$184,084,333	\$177,981,002	\$170,502,460	\$169,935,096	\$169,296,795	\$176,956,997	\$1,048,756,683

# MILWAUKEE PUBLIC SCHOOLS

Although the City of Milwaukee does not play a direct role in educating children, the city does provide the Milwaukee Public Schools (MPS) with important assistance in meeting the capital improvement needs of the city's school district. Specifically, the city is required under state law to issue debt for Milwaukee Public Schools and make principal and interest payments on this debt. The debt issued by the city on behalf of the school district partially funds both major building maintenance and expansion of capacity projects. By funding MPS' capital program, the city plays an important role in helping the district provide students with efficient

The primary assessment mechanism utilized by Milwaukee Public Schools and the City of Milwaukee to determine the district's capital needs is the Cyclical Major Maintenance Program. This innovative program, most recently published in 1999, was developed in response to the need for a proactive and longrange approach to major maintenance projects at MPS facilities.

and safe school facilities.

The Cyclical Major Maintenance Program addresses the replacement needs of 37 primary facility components over a 40 year period that began on January 1, 1999. It encompasses 200 Milwaukee **Public** Schools facilities including 155 school buildings, 8 office buildings, and 37 recreational buildings. The program does not, however, contain information about minor, seasonal, and/or as needed basis maintenance activities that are funded through the schools' operating budget.

The MPS Facilities and Maintenance Services Division periodically assesses the condition of school facilities. Condition ratings of "poor", "fair", "good", or "excellent" are as signed to each facility's 37 primary components. Attributes of these ratings are:

#### **Poor Condition:**

- Over 50% of components are in substandard condition and/or have failed.
- At end of service life, fails to meet functional requirements.
- Requires excessive and constant attention and major corrective repair.

Table 14

	_			
Building Component	Poor	Fair	Good	Excellent
Air Balancing	24%	20%	23%	33%
Air Conditioner - Central	43%	38%	5%	14%
Boilers	23%	37%	16%	24%
Carpeting	10%	20%	68%	2%
Chillers	30%	31%	13%	26%
Chimneys - Masonry	12%	32%	42%	14%
Coils/Univents	23%	48%	23%	6%
Condensate Receivers	36%	20%	24%	20%
Cooling Tower And Pumps	35%	15%	10%	40%
Curtains - Stage/Gym	4%	53%	31%	12%
Dampers/Actuator	10%	26%	25%	39%
Door Hardware	13%	24%	7%	56%
Doors - Exterior	21%	52%	20%	7%
Elevator	8%	26%	52%	14%
Emergency Generators	9%	76%	12%	3%
Energy Management System	16%	51%	26%	7%
Gym Floor - Resilient	40%	60%	0%	0%
Lighting Panels - Stage	13%	41%	14%	32%
Lockers - Corridor	22%	41%	24%	13%
Lockers - Gym and Team	18%	46%	17%	19%
Painting - Exterior	23%	16%	35%	26%
Parapet Walls - Masonry	24%	26%	20%	30%
Parking Lot - Asphalt	9%	74%	15%	2%
Parking Lot - Concrete	4%	69%	12%	15%
Playground - Asphalt	8%	58%	22%	12%
Pool Bulkhead	0%	83%	17%	0%
Pool Filtration System	4%	39%	22%	35%
Pool Piping	19%	44%	31%	6%
Roof	38%	17%	17%	28%
Tank - Domestic Hot Water	7%	53%	20%	20%
Tennis Court	29%	31%	20%	20%
Tot Lot	12%	13%	39%	36%
Track - Athletic	17%	41%	0%	42%
Traps/Valves/Compressors	13%	43%	6%	38%
Vacuum Pumps	21%	15%	13%	51%
Vehicle	21%	24%	29%	26%
Window Assemblies	27%	36%	13%	24%
Average Rating:	19%	39%	21%	21%
Average Rating June 2000	21%	40%	21%	18%
Average Rating January 1999	22%	42%	21%	15%

### Fair Condition:

- 25% to 50% of components are in substandard condition and/or have failed.
- Between the middle and end of service life.
- Requires some corrective repair and attention.

#### Good Condition:

- Less than 25% of components are in substandard condition and/or have failed.
- Between the beginning and middle of service life.
- Requires only routine maintenance or minor repair.

#### **Excellent Condition:**

- Components are new or easily restorable to "like new" condition.
- At beginning of service life.
- Requires only minimal routine maintenance.

Table 14 shows the consolidated rating of each component category as of June 2001. The average component rating for the MPS Major Maintenance Program overall was 19% Poor; 39% Fair; 21% Good; and 21% Excellent. The overall component ratings have steadily improved since 1999.

The new Bradley Technology and Trade High School opened in fall 2002. The city provided \$15 million to the private/public partnership that planned and constructed the school. This state of the art school will give students extraordinary opportunities to learn trade and technical skills using cutting edge equipment. Its design allows for future changes through a flexible layout and additional utility capacity. The new school will substantially contribute to Milwaukee's 21st century economy as the old Milwaukee Tech provided skilled worker to Milwaukee business and industry throughout the last century.

#### SIX-YEAR PLAN

A total of \$72 million will be allocated to MPS capital needs over the next six years (see Table 15). During the plan, the city will provide \$10 million annually for MPS Major Maintenance Program. Components of the Major Maintenance Program include roof repair or replacement, heating system replacement, exterior masonry repair, exterior window and door repair, elevator replacement,

grounds reconstruction, air supply system renovation, and plumbing system repair.

The remaining \$2 million annually funds ADA improvements at MPS facilities. ADA improvements include exterior access accommodations, restroom alterations, doorway widening, and similar improvements. MPS is responsible for paying the debt service for ADA improvements.

Table 15

	2003-2008 Capital Improvements Plan for Milwaukee Public Schools												
Project Title	2003 2004 2005 2006 2007 2008 Six-Year Project Title Budget Plan Plan Plan Plan Plan Plan												
Maintenance/Remodeling ADA Improvements TOTAL PROJECTS	\$10,000,000 2,000,000 \$12,000,000	\$10,000,000 2,000,000 \$12,000,000	\$10,000,000 2,000,000 \$12,000,000	\$10,000,000 2,000,000 \$12,000,000	\$10,000,000 2,000,000 \$12,000,000	\$10,000,000 2,000,000 \$12,000,000	\$60,000,000 12,000,000 \$72,000,000						

Inventory of Capital Assets As of December 31, 2001	
Miles of Street Freeways	40.1
State Highways	25.7
State Maintained Roads	7.0 25.7
County Trunk Highways County Park Roads	25.7 21.7
Harbor and Water Department Roads	1.5
Arterials	279.5
Collectors	72.2
Locals	943.3
Bridges (Number)	217.0
Miles of Alleys	415.0
Miles of Sewers	
Storm	953.0
Sanitary	934.0
Combined	546.0
Miles of Sidewalk	2,200.0
Fire Stations (Number)	36.0
Police Stations (Number)	7.0
Public Libraries (Number)	13.0
Recreational Facilities (Number, Includes MPS)	277.0
Miles of Water Mains	1,953.4
Pumping Stations	
Major	3.0
Booster	11.0
Lights	
Street	66,419.0
Alley	8,790.0
Traffic Controls	100.004.0
Signs (Number) Signals (Number)	100,904.0 720.0
Controllers (Number)	706.0
Pavement Markings (Miles)	311.0
Crosswalks (Number)	1,688.0
Tax Incremental Districts (Number)	42.0